

Learning Achievement of Primary School Children in Reading and Mathematics

Baseline Assessment Study of
Five Districts of Chhatisgarh Region of
Madhya Pradesh
India

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PREFACE

This Baseline assessment Study (BAS) was conducted in the five districts of Chhatisgarh Region of Madhya Pradesh (Bilaspur, Raigarh, Rajnandgaon, Sarguja and Shahdol) This is the first phase of the Assessment of Learning Achievement to be supported through the District Primary Education Programme (DPEP).

The study was completed within the constraints of time and manpower. The study so far used survey design which yield descriptive profile and correlates. The cause and effect relationships are not established. Quasi experimental studies are required to support correlational and prediction studies.

The present report is the outcome of the research study. The report has ten chapters First three chapters deals with the methodology of the study. The analysis, interpretation, conclusion and suggestions related to schools, teachers and students are presented in chapters four to nine. The last chapter deals with the implications. The study has implications for planners, curriculum workers, administrators, researchers, teachers, community members and finally anybody who has interest in the primary education of the children of the nation.

I hope that this study will provide empirical basis on critical variables which form part of the DPEP for designing desirable interventions. The generalisability of study have implications for these districts only, the generalisation for the whole State may pose problems.

I appreciate the help and support received from different sources for successful conduct of the study viz., the Government of Madhya Pradesh particularly the Commissioner of Public Instruction, Director, SCERT, Deputy Directors of Education, the designated DIET faculty, Block Education Officers and Assistant District Inspectors of Schools who provided admirable organisational support. I am grateful to Shri S.P. Dubey, Commissioner, Bilaspur for his cooperation in conducting this study.

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K.M. Gupta

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ACRONYMS AND ABBREVIATIONS

| | | |
|--------|---|---|
| ADIS | · | Assistant District Inspector of School |
| AE | | Adult Education |
| BAS | · | Baseline Assessment Study |
| BEO | · | Block Education Officer |
| BRC | · | Block Resource Centre |
| CRC | · | Cluster Resource Centre |
| CTE | | College of Teacher Education |
| DA | · | Daily Allowance |
| DIET | | District Institute of Education and Training |
| DPEP | · | District Primary Education Programme |
| DTESE | | Department of Teacher Education and Special Education |
| ECCE | · | Early Childhood Care and Education |
| GOI | | Government of India |
| IASE | : | Institute of Advance Study in Education |
| JRY | : | Jawahar Rozgar Yojna |
| LAT | | Language Achievement Test |
| MAT | · | Mathematics Achievement Test |
| MHRD | | Ministry of Human Resource Development |
| MLL | : | Minimum Level of Learning |
| MP | · | Madhya Pradesh |
| NCERT | : | National Council of Educational Research and Training |
| NIEPA | : | National Institute of Educational Planning and Administration |
| NPE | : | National Policy on Education |
| OB | · | Operation Blackboard |
| OBC | | Other Backward Castes |
| PECR | : | Primary Education Curriculum Renewal |
| PoA | · | Programme of Action |
| RGPSM | · | Rajiv Gandhi Prathamik Shiksha Mission |
| SC | : | Scheduled Caste |
| SCERT | : | State Council of Educational Research and Training |
| SIP | : | School Improvement Plan |
| ST | : | Scheduled Tribe |
| TA | · | Travelling Allowance |
| TLC | | Total Literacy Campaign |
| TS | · | Teacher Schedule |
| TNA | | Training Needs Assessment |
| UEE | | Universalisation of Elementary Education |
| UNICEF | · | United Nations Children's Fund |
| VEE | | Village Education Committee |

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EXECUTIVE SUMMARY

Introduction

1. The Baseline Assessment Study (BAS) was a large-scale multipurpose survey for assessing learning achievement of pupils of Class V. The main purpose of the survey was to collect bench-mark data of the achievement of students of Class V and II, dropouts, teachers, head teachers and schools. The data was to be utilised as input in the District Primary Education Programme (DPEP). The DPEP envisaged the enhancement of the achievement of the students at primary level and improve the effectiveness of primary schools.

Objectives

2. The main objective of the study was to estimate learning achievement of Class V students in Language and Mathematics. The bench-mark data relating to schools, teachers and students to know the position of enrolment, attendance, dropout rate, teacher training, supervision, etc. was also collected to know the respective positions.

Sample

3. The survey was conducted in five districts -Bilaspur (BPR), Raigarh (RGH), Rajnandgaon (RNG), Sarguja (SGI) and Shahdol (SDL) -of the Chhatisgarh region. Forty five schools were randomly selected from the rural areas and urban areas of each of the above districts. From the districts of Raigarh and Rajnandgaon, 36 and 42 schools, respectively, were randomly selected for sampling. These schools were selected from the rural and urban areas in the proportion of the population according to the 1991 Census. For the investigation, the sample design consisted of the achievement of 30 pupils from Class V, 20 pupils from Class II, five dropouts and five teachers including the head teacher, from a school. In many schools the expected sample in all the categories -students in Class V and II, teachers and dropouts - was not available. The school records were either not available or were not properly maintained. The addresses of the dropouts, as recorded in the school registers, were not traceable. The sample size from all the five districts consisted of 2432 Class V students, 2256 Class II students, 484 dropouts and 498 teachers, including head teacher, from 214 schools.

Training and Data Collection

4 Forty-seven persons were recruited to work as Field Investigators (42) and District Supervisors (5). The field staff were provided intensive training in the procedure of data collection through the interactive mode for 10 days. The data was collected in three months from the five districts. At the initial stage, the field scrutiny of the data was carried out by the District Supervisor daily in the evening. The Professional Assistants recruited at Delhi and deputed in the region carried out the scrutiny of the data at the District Headquarters. The scrutiny and verification of the data were also rigorously subjected to in each and every item of the schedule prior to data entry. The data was put to thorough verification and editing.

Instruments

5. The assessment of learning achievement of Class V students was carried out through Language Achievement Test (LAT) and Mathematics Achievement Test (MAT). Both these tests were standardised by the NCERT. The Student Present Schedule (SP) was administered for collecting information about background variables of Class V students. The information of background variables of dropouts was collected through Dropout Student Schedule (SD). Teacher Schedule was used for interviewing teachers and head teachers to collect information about their background and teaching-learning variables. School Record Schedule (SR) was used to extract information relating to schools. Field Notes were filled in by each investigator separately to describe the procedure of selection of sample of students and teachers. The Field Notes also consisted of the qualitative observation of the investigating team to supplement the data collection from a school.

Statistical Techniques

6. The data were put to statistical treatment. The percentage were calculated and given in most of the Tables to facilitate interpretation. The mean and standard deviation of achievement scores were calculated. The 't' test was used to compare the achievement of students of various groups. The level of significant is taken as 0.05.

RESULTS

Characteristics of Students of Class V

7. The sample of Class V students consisted of 2432 students. Out of which 1264 were boys (51.97%) and 1168 were girls (48.02%). The percentage of boys varied from 47.8 in Raigarh to 56.4 in Shahdol. The percentage of girls ranged from 43.6 in Shahdol (lowest) to 52.2 in Raigarh (highest). The proportion of girls was less than that of boys in Class II as well. This indicated that less number of girls attend the school than boys. The proportion of the Scheduled Caste and Scheduled Tribe students was less than the population in all the five districts according to the 1991 Census on an average. The percentage of SC/ST girls was lower than the SC/ST boys in Bilaspur, Rajnandgaon and Shahdol. In Raigarh and Sarguja the percentage of SC/ST girls was higher than SC/ST boys.

The proportion of pupils belonging to the families where non-agricultural occupations were followed was slightly higher than agricultural families in the districts of Bilaspur, Rajnandgaon and Sarguja. In Shahdol, a substantial proportion of students (64.5%) was from non-agricultural families. In Raigarh (55.5%) the agriculture was the main occupation of the guardians of students.

More than one fourth parents of the sampled students were illiterate. A substantial percentage of mothers (64.78%) was not able to read and write.

10. More than 90 per cent students in Class V had their own textbooks in language, mathematics and environmental sciences in all the five districts. A large number of students (about 90%) expressed their desire to study further.

11 The model age for Class V students was 11 years. About one-third students were in the age group of 12 years.

12 About 50 per cent students got the support of the family members in their studies, the maximum students received academic help from their elder brothers and sisters.

13. The reading materials other than textbooks were available to about 20 per cent students in all the districts. More girls reported the availability of reading material than boys in all the districts. The availability of the newspaper was reported by less than 10 per cent students from all the districts.

14 Mother tongue and the medium of instruction were the same for the large number of students. The percentage of students reporting different mother tongue and medium of instruction were 2.5 in Bilaspur, 1.0 in Raigarh, 1.3 in Sarguja and 0.5 in Shahdol.

15. It was found that the feedback was not provided to the students after the test. Students' involvement in the classroom activities is limited. Homework was given in limited quantity but not corrected regularly. A small percentage of students had difficulty in understanding the language of teachers. Special efforts and training to the teachers are required to promote the participation of students in the classroom.

16. In the absence of a teacher, the students worked on their own or a student supervised the work of the whole class. In many cases, students played or were allowed to go home. The percentage of students who reported the above three activities was 62 in Bilaspur, 38 in Raigarh, 54 in Rajnandgaon, 58 in Sarguja and 48 in Shahdol.

Achievements of Class V Students

Language

17. The mean achievement of Class V students in language ranged from 28.18 in Shahdol to 36.29 in Raigarh out of 84 marks. In terms of percentage, the achievement of students in language was below 43 per cent in all the districts. The mean achievement of Class V students in language was 33.88 in Bilaspur, 32.41 in Rajnandgaon and 31.82 in Sarguja out of 84. It may be concluded that the achievement of students in language in Class V is below the requirement. The percentage of students receiving marks below 40 per cent in language were 49.8 in Bilaspur, 45.5 in Raigarh, 54.1 in Rajnandgaon, 56.6 in Sarguja and 69.2 in Shahdol.

18. The achievement of Class V students in language was further analysed according to gender. The mean achievement of boys was higher (19.32) than girls (16.42) in word reading in Bilaspur. The difference was statistically significant. Similarly, the mean achievement of boys (17.09) was higher than that of girls (14.72) in reading comprehension in the district Bilaspur. The difference was statistically significant. In other districts the achievement of boys was higher than that of girls. The difference was not statistically significant. The overall achievement of students in word meaning was higher than the reading comprehension in language.

19. The difference between the mean achievement of students from rural and urban areas was statistically significant in the districts of Bilaspur, Raigarh, Sarguja and Shahdol in word meaning and reading comprehension. The students from the urban area achieved higher than students from the rural area in word meaning and reading comprehension in all the districts except Shahdol. In the district of Shahdol, students from the rural area achieved higher than students from the urban area in word meaning and reading comprehension. The mean achievement of SC students was higher than that of ST students in language.

20. There were students in Class V whose achievement was zero in Hindi language in the Hindi-speaking area. The percentage of students Not Approaching Mastery Level lies between 46 to 49. They have achieved a score between one and 39 per cent. The teaching of language required improvement in all the districts.

Mathematics

21. The mean achievement of Class V students in mathematics was very low (mean 11.65) in five districts. The mean achievement scores for the districts were 12.59 in Bilaspur, 12.88 in Raigarh, 11.73 in Rajnandgaon, 10.03 in Sarguja and 10.59 in Shahdol out of 40 marks. The mean achievement scores expressed in terms of percentage ranged from 25 in Sarguja to 32 in Raigarh. This shows that on an average the achievement of Class V students in mathematics was below 32 per cent in all the districts. The percentage of students receiving marks below 40 per cent in mathematics was 78.0 in Bilaspur, 78.3 in Raigarh, 86.4 in Rajnandgaon, 91.0 in Sarguja and 92.2 in Shahdol.

22. The mean achievement of boys in mathematics was higher than that of girls in the districts of Bilaspur, Rajnandgaon and Shahdol. The difference was statistically significant in favour of boys. In Raigarh, the girls achieved higher than the boys. The difference in achievement of students in mathematics from rural and urban areas was statistically significant in Bilaspur, Rajnandgaon, Sarguja and Shahdol. The students from urban areas achieved higher in mathematics than the students from rural areas in Bilaspur, Raigarh, Rajnandgaon and Sarguja. In Shahdol, students from the rural area achieved higher in mathematics than the students from the urban area. The difference was statistically significant. The achievement of SC students in mathematics was higher than ST students in Raigarh, Sarguja, Shahdol. The achievement of ST students in mathematics was higher than SC students in Bilaspur and Raigarh.

23. About four per cent students achieved zero in mathematics. More than three-fourth students achieved between one and 39 per cent marks in mathematics. The teaching of mathematics requires improvement in all the schools.

24. There existed a positive relationship between achievement in mathematics and language in all the districts.

25. The schools have heterogeneous grouping of students with a larger gap between maximum and minimum scores. The achievement of students in language in 55 per cent schools of Bilaspur is below 40 per cent. Similarly, the achievement of students in mathematics in 82 per cent schools of Bilaspur is below 40 per cent

Achievements of Dropouts

Literacy

26. The mean scores in literacy were 1.67 in Bilaspur, 1.92 in Raigarh, 2.10 in Rajnandgaon, 0.42 in Sarguja and 0.54 in Shahdol out of 8 marks. The difference in mean achievement of students from urban and rural areas was statistically significant in Rajnandgaon and Sarguja. The students from urban areas achieved higher than that of rural areas.

Numeracy

27. The mean achievement of dropout students in numeracy was 1.38 in Bilaspur, 1.45 in Raigarh, 1.72 in Rajnandgaon, 0.64 in Sarguja and 0.87 in Shahdol out of 8 marks. The mean scores of achievement of dropouts in literacy and numeracy were exceptionally low in all the districts.

Achievements of Class II Students

Language

28. The mean achievement of scores of Class II students in language were 13.01 in Bilaspur, 11.99 in Raigarh, 12.33 in Rajnandgaon, 9.71 in Sarguja and 9.97 in Shahdol out of 20 marks. The mean achievement of Class II students in Bilaspur is below 66 per cent. In Sarguja and Shahdol, the achievement of students of Class II is below 50 per cent. In letter reading and word reading, the mean achievement of boys was higher than that of girls in Bilaspur and Sarguja. The difference was statistically significant. The mean achievement of SC/ST students and Other castes students was compared in letter reading and word reading. It was observed that the mean achievement of Other castes was higher than the mean achievement of SC/ST students. The difference was statistically significant in Bilaspur, Sarguja and Shahdol. Overall, the students achieved higher in letter recognition than word reading.

Mathematics

29. The mean achievement scores of Class II students in mathematics were 7.57 in Bilaspur, 7.67 in Raigarh, 7.65 in Rajnandgaon, 5.25 in Sarguja and 4.93 in Shahdol. The mean achievement score in number recognition of boys was higher than girls in Bilaspur, Rajnandgaon, Sarguja and Shahdol. The difference was statistically significant. The achievement of Class II students of rural and urban areas in mathematics was not significantly different in all the districts in number recognition. Overall, the students achieved higher in addition and subtraction than number recognition.

Attendance and Participation

Enrolment

30. The enrolment of boys was higher than girls in all the classes in Bilaspur, Sarguja and Shahdol. The enrolment of girls was slightly higher in Raigarh and Rajnandgaon in all the classes. The percentage of enrolment of students from the rural area was lower than the population proportion of that area according to the 1991 census in all the districts. The percentage enrolment of students from the urban area was higher than the population proportion of that area according to the 1991 census.

31. The enrolment of SC students was higher than the population proportion in the districts of Bilaspur, Raigarh, Sarguja and Shahdol according to the 1991 Census. The enrolment of ST students in all the districts was lower than the population proportion according to the 1991 Census. The percentage of enrolment declined from Class I to V in all the districts for SC and ST students.

32. The enrolment has decreased sharply from Class I to V in all the districts. The enrolment of girls has decreased almost 50 per cent from class I to V in the districts of Raigarh, Sarguja and Shahdol. Two out of the three girls of Class I were enrolled in Class V in Bilaspur and Raigarh.

33. In proportion to the population residing in the rural areas of Bilaspur the enrolment in schools was less. More students from the urban population were enrolled in primary schools from Class I to V in all the districts.

34. In Class II in all the districts attendance was 50 per cent. The pattern of attendance of boys and girls is almost the same in all the districts.

35. In Class V the percentage of attendance for boys ranged from a low of about 55 in Sarguja to a high of about 75 in Raigarh.

Class Size

36. The average class size in Class I varied from 20.91 in Sarguja to 37.42 in Bilaspur. The average class size declined sharply from Class I to V in all the districts.

Dropout Rate

37. More dropout girls (56.20%) were covered in the study than boys (43.80%). It implies that more girls than boys were dropouts. The dropout rate for girls was higher than the dropout rate of boys in all the districts. The dropout rate of girls was the highest in Raigarh (52.49%). The dropout rate was higher in rural areas than the dropout rate in urban areas. The dropout rate was the highest in the rural area of Sarguja (53.75%). More than 85 per cent dropout students belonged to rural areas. The dropout rate of SC/ST students showed a mixed trend. More than 50 per cent dropout students were from SC/ST in all the districts except Rajnandgaon. More than one-third students left the school in Class II in all the districts. It was also observed that more than 50 per cent fathers and 90 per cent mothers were illiterate in the case of dropout students.

Class Repetition

38 The percentage of Class V students failing once was the highest in Raigarh (100%). The percentage of Class V students failing once was 75 in Bilaspur, 67 in Rajnandgaon, 88 in Sarguja and 75 in Shahdol. There were instances where students failed more than once. In Shahdol 25 per cent students reported that they have failed thrice.

Teachers

Academic Qualification

39. The survey revealed that in all the districts there were teachers who were only middle passed. The percentage of such teachers were 17.8 in Bilaspur, 3.4 in Raigarh, 14.2 in Rajnandgaon, 15.9 in Sarguja and 2.3 in Shahdol.

Preservice Training

40. A large number of school teachers possessed elementary teacher training certificates. The percentage of trained primary teachers at elementary level were 68 in Bilaspur, 55 in Raigarh, 64 in Rajnandgaon, 57 in Sarguja and 56 in Shahdol. A substantial percentage of teachers were untrained in all the districts: 27 in Bilaspur, 44 in Raigarh, 31 in Rajnandgaon, 36 in Sarguja and 43 in Shahdol.

Inservice Education

41. The percentage of teacher who attended inservice education programmed during the last five years was 46 in Bilaspur, 43 in Raigarh, 24 in Rajnandgaon, 43 in Sarguja and 41 in Shahdol. The percentage of such female teachers who had no inservice training was higher than males. More than 50 per cent teachers had desired inservice training.

Multigrade Teaching

42. The percentage of teachers handling more than one class at a time was 40 in Bilaspur, 71 in Raigarh, 60 in Rajnandgaon, 66 in Sarguja and 76 in Shahdol.

Textbooks

43. The teachers reported maximum use of textbooks. The textbook was used for reading and explanation of the text by the teacher and for reading aloud and homework by the students. The result of the achievement test of students of Class V and Class II indicated poor achievement of students in reading and comprehension.

Home Work

44. Most of the teachers assigned home work to the students in all the districts. In mathematics home work one to three questions were given while in language one page was given for reading regularly by many teachers.

Supervision

45. A substantial percentage of teachers (more than 75%) reported no classroom supervision by the Block Education Officer and the head teacher.

Additional Teachers

46. About 50 per cent schools from Bilaspur, Raigarh and Sarguja felt the need for additional teachers.

Teaching Aids

47. The teaching material supplied under the scheme of Operation Blackboard was available in many schools. The teacher reported the availability of science kit (65-90%) and mathematics kit (47.81%) in schools. About 50 per cent teachers had teachers' guides whereas the dictionary was available with less than 50 per cent teachers.

Working Days

48. About 90 per cent schools reported to be working between 226-250 days in a year in all the districts except Sarguja. In Sarguja about 70 per cent schools fell in the category. About 14 per cent schools observed 201 to 225 working days in a year. In other districts about 10 per cent schools worked for 201-225 days. In Bilaspur about two per cent schools worked for 176-200 days.

Facilities in Schools

49. It was found during survey that school records are not properly maintained. At many places school records were not available. Also the statistics of repetition and dropout were not maintained regularly. Surprisingly, the names of students were available in the register even when they were absent for a long time.

50. The potable water was not available in more than 50 per cent schools. Also the toilet facilities were not available in about 90 per cent of schools.

51. The need for additional classrooms was strongly felt in more than 80 per cent schools in all the five districts.

52. About 90 per cent schools had their own buildings. About 10 per cent schools were running in rent-free buildings. The highest number of such schools was in Bilaspur (13.3%).

53. The facility of nursery schools, balwadis, ICDS was availed by less than four per cent students in Bilaspur, Rajnandgaon, Sarguja and Shahdol. In Raigarh about 15 per cent students attended the preschool education centre.

54. More than 75 per cent schools reported having the facility of annual medical check-up. The immunization facility was not available to many schools. The percentage of such schools varied from 15.6 in Shahdol to 64.3 in Rajnandgaon. About 10 per cent schools possessed First Aid Kits.

Implications

55. The Baseline Assessment Study indicated low performance of students in language and mathematics. The district-specific characteristics need to be taken into consideration while drawing up the programme to handle the problem of low achievement. There is an urgent need to improve classroom instruction, supervision and inservice training of teachers.

56. To facilitate enrolment and retention of girls, the community is to be mobilised. There is a need to design awareness development programmes in this regard.

57. Immediate steps are to be taken to promote upper primary education among SC/ST groups as these students desired to study further.

58. The reading material for students should be made available in schools in time. The students need to be encouraged to utilise the reading material provided in the schools.

59. The over-dependence of teachers and students on textbooks needs to be studied thoroughly. The use of teachers' guides should be promoted in this regard.

60. The teaching-learning process was far from satisfactory. The lower class students were not equipped with the skills and competencies required to move to upper classes. Deterioration begins at the beginning and it is reflected in the performance of students in the basic skills in Class V.

61. The teaching and learning of language, mathematics and environmental sciences is to be made skill-based. The emphasis should be on the mastery of competencies essential in different subjects by the students. Adequate physical facilities should be provided to all these schools. In order to check the dropout rate the teaching-learning process needs to be improved substantially.

62. Special efforts have to be made by the teachers, the community and the State Government to check repetition. The failure of students more than once is a matter of serious concern.

63. Special steps should be taken by the State Government to get all the teachers trained.

64. The system of inservice education should be strengthened. With the coming up of support from the Central Government for qualitative improvement of teacher education, the DIETs and IASEs should be made operational in all these districts.

65. Teachers should be provided training in multigrade teaching at a mass scale. Adequate resources need to be mobilised to meet the demand of teachers for training in the subject.

66. Teaching aids should be made available to the teachers.
67. The head teacher should be provided training in the maintenance of School Records.
68. The system of school supervision is not operational in the districts under study. Immediate steps should be taken to make district officials responsible for the supervision of the schools. The district level offices should also be provided training in instructional supervision.
69. The demand of the schools for additional classrooms should be met.
70. Vacant positions of teachers, particularly in remote and difficult locations, need to be filled up immediately.
71. Additional teachers should be posted in all the schools, where required, for effective transaction of the curriculum.
72. Immediate steps should be taken to enhance the number of working days of the schools to 250.
73. The facilities for drinking water and toilets are to be created in all the schools without exception.
74. School Health Services should be strengthened. All the students need to be covered for medical check-up and immunization.
75. A mechanism is to be designed to enhance community participation. The possibility of monitoring the performance of schools by the community may be explored.
76. In order to promote UEE, RGPMS should also coordinate the activities of TLC as well as other beneficiary schemes like JRY for the community.

CHAPTER 1

INTRODUCTION

The nation has made tremendous progress in all walks of life. But the goal of Universalisation of Elementary Education has not been achieved so far. We have developed a national system of education based on national priorities but the cherished dream, as envisaged in the directive principles of the state policy of Indian Constitution (article 45), "the State shall endeavour to provide, within a period of ten years from the commencement of this Constitution, free and compulsory education for all children until they complete the age of 14 years" remained elusive. The rate of literacy was 52.11 per cent according to 1991 Census. Many children borne in free India, after the adoption of Indian Constitution were not able to enrol themselves in the schools. This has resulted in alarmingly high population of illiterates to 3240 lakh

In 1948, the United Nations adopted the universal declaration of human rights (article 26). "Everyone has the right to education. Education shall be free, atleast in the elementary and fundamental stage". The nation worked for it. The desire of the nation reflected in the recommendations of various commissions and committees established after independence. Efforts are being made to eliminate illiteracy through improved primary education and adult education programmes. The World Conference on Education for All (Jomtien, Thailand, 5-9 March 1990) recognised education as a fundamental right for all people, women and men of all ages throughout the world. It was realised that the problems related with economic stagnation and disparities, rapid population growth, environmental degradation and violence and crime cannot be attacked without meeting the basic learning needs of population. With the advancement of science and technology, research and innovations, experiences and reforms, it is possible to achieve the goal of basic education for all. The world declaration on Education for All in article I states that 'Every person - child, youth and adult - shall be able to benefit from educational opportunities designed to meet their basic learning needs'.

The future of nation depends on how it is able to phase the challenge of universalising access and promoting equity in education. The means and scope of basic education has been broadened. It includes early childhood, care and initial education. The universal primary education is a part of basic learning needs. The basic education also includes education programmes in health, nutrition, population, family life, technology and environmental sciences. The societal issues related with problems being phased by a nation are also covered in basic education. The framework for action to meet basic learning needs clearly spells out achievement and targets in the field of education. Facilities for Early Childhood Care and Education need to be expanded. Efforts have to be made for universal access to primary education. It was expected from each country to develop a long-term plan of action to meet the learning needs of the population. The national framework may include studies for the evaluation of the existing system.

The Delhi declaration signed on 16 December 1993 reaffirmed its commitment to the goal set in the World Conference on Education for All. The nation promised, 'to eliminate disparity of access to basic education arising from gender, age, income, family, culture, ethnic and linguistic differences and geographic remoteness'. A commitment was made to achieve the goal of Education For All by the year 2000.

In the present formal set-up, education at primary level is institutionalised and structured. It remained far away from the creative measures despite the fact that paraphernalia from Education Inspectors, Block Education Officers, District Education Officers, Director and their assistance is in existence. The system is not able to support the primary school teacher for the achievement of children.

The National Policy on Education 1986 stated: "The new thrust in elementary education will emphasise universal enrolment, retention, access and success". The Challenge of Education (1985) warned that the level of educational attainment among people should not be too disparate between sexes, among social groups and across geographical reasons. This is essential so that education can contribute effectively in the process of national development.

Elementary education is the most significant stage but economic and financial constraints had always influenced it. Essential facilities were not extended to this stage of education even though central and state governments shared the responsibility. The judicious resources to phase the issues related with access, equity and minimum threshold facilities for quality elementary education are to be provided.

The District Primary Education Programme (DPEP) is planned to meet the challenge of Universalisation of Elementary Education successfully. The baseline study is a part of DPEP.

BACKGROUND OF DISTRICTS

The population of Madhya Pradesh was 66198 thousand in 1991 Census. The State witnessed relatively higher population growth with decadal variation in population per cent (26.84) in comparison to 1981 Census. The literacy rate for Madhya Pradesh was 44.20 per cent. The State remained educationally backward. In order to promote educational activities in the State, the District Primary Education Programme was envisaged for nineteen districts. The present study covered five districts - Bilaspur (BPR), Raigarh (RGH), Rajnandgaon (RNG), Sarguja (SGJ) and Shahdol (SDL).

The proportion of rural-urban population is presented in Table 1.1. The district of Bilaspur comprised 83 per cent rural population and 17 per cent urban population. The composition of rural and urban population in Raigarh was 90.1 per cent and 9.9 per cent, respectively. The district has the lowest urban population in comparison to other four districts

**Table 1.1: Percentage Distribution of Rural Urban Population
According to 1991 Census**

| District | Rural | Urban |
|----------|-------|-------|
| BPR | 83.00 | 17.00 |
| RGH | 90.10 | 09.90 |
| RNG | 85.40 | 14.60 |
| SGJ | 88.00 | 12.00 |
| SDL | 78.80 | 21.20 |

The proportion of SC and ST population in total population of each districts is presented in Table 1.2. Surguja is predominantly a tribal district. It has about 44 per cent tribal population according to the 1991 Census. The population of tribals in Raigarh and Shahdol is also proportionately high. Both the districts have more than 45 per cent tribal population. In comparison to the average MP tribal population, all the districts under study have higher percentage of tribal population.

**Table 1.2: Percentage Distribution of SC and ST Population
According to 1991 Census**

| District | SC | ST |
|----------|-------|-------|
| BPR | 18.00 | 23.50 |
| RGH | 11.60 | 47.40 |
| RNG | 10.30 | 25.10 |
| SGJ | 05.50 | 53.60 |
| SDL | 07.70 | 46.30 |
| M.P. | 14.55 | 23.27 |
| INDIA | 16.48 | 08.08 |

In Surguja and Shahdol the SC population is below 10 per cent. Except Bilaspur, all the four districts possess lower percentage of SC population in comparison to average SC population in Madhya Pradesh.

Table 1.3: Rate of Literacy According to 1991 Census

| District | Male | Female | Rural (Female) | Urban (Male) | Total |
|----------|-------|--------|-------------------|-----------------|-------|
| BPR | 62.87 | 27.26 | 20.92 | 83.68 | 45.26 |
| RGH | 56.03 | 26.46 | 23.48 | 82.37 | 41.22 |
| RNG | 61.26 | 27.83 | 22.24 | 83.50 | 44.39 |
| SGJ | 42.13 | 17.14 | 12.50 | 77.81 | 30.09 |
| SDL | 48.44 | 20.09 | 12.85 | 74.68 | 34.78 |
| M.P. | 58.42 | 28.85 | -- | -- | 44.20 |
| INDIA | 64.13 | 39.29 | -- | -- | 52.21 |

*Source: Census of India 1991, Series 1, Paper2, 1993
Final Population Totals, New Delhi, 1993*

According to the 1991 Census a person is literate if he or she can read and write with understanding. The question of literacy was carved for population aged seven years and above. In the post-independent period rate of literacy improved substantially from 18.33 in 1951 to 52.21 per cent in 1991. The rate of female literacy increased from 8.86 per cent in 1951 to 39.39 in 1991. The rate of literacy for male population increased from 27.16 per cent in 1951 to 64.13 in 1991. The overall rate of literacy improved markedly in the state of Madhya Pradesh to 44.20 per cent in 1991.

The female literacy rate in all the five districts is below the female literacy rate of Madhya Pradesh. Except Bilaspur and Rajnandgaon, all the other districts have male literacy rate lower than the state male literacy rate. The situation is alarming in all the districts. All the districts are educationally backward.

The districts selected for the study are predominantly inhabited by tribal population, educationally backward and a large majority of the people reside in rural areas.

CHAPTER 2

SURVEY ORGANISATION

This chapter presents planning of survey organisation. It deals with the purpose, objectives, sample design, instruments for assessing learning outcomes of various groups, schedules, field notes and statistical techniques used for the study

The design of the Baseline Assessment Study was evolved at the national level after considering the research studies available (Shukla, Garg, Jain, Arora and Rajput, 1990; Govinda and Varghese, 1994; Sajitha and Ramkrishnan, 1993)

PURPOSE OF THE STUDY

The main purpose of the study was to assess the learning achievement of students in language (word meaning and reading comprehension) and mathematics nearing the end of the primary school cycle. In the state of Madhya Pradesh primary cycle of education is completed at Class V. Therefore, the achievement of Class V students was studied by taking the competencies achieved by them up to Class IV. As the socio-cultural background influences the achievement of students, gender and caste differences in achievement were studied.

The economic differences in rural and urban population might have created difference in the achievement of students. Therefore, the study was planned to compare the achievement of students from rural and urban areas.

The achievement of students in lower primary classes may be an indicator of achievement of students in higher primary classes. Therefore, an oral test was used to know about the competencies of students in Class II which should have been mastered by the students at the end of Class I.

The study was designed in such a way to provide data of interest about variables relating to school, teacher and head teacher.

The dropout students always attracted the attention of researchers. The achievement of dropout students in literacy and numeracy was of special interest. The variables relating to dropouts were also studied to throw light on the causes of the phenomenon.

Thus the focus of the study was to generate data-base on achievement, enrolment, attendance, repetition rate, school facilities, teacher-pupil ratio, teachers' characteristics, supervision, teaching process, etc. which would be useful to planners and researchers.

OBJECTIVES

The Baseline Assessment Study was planned with the following main objectives relating to achievement of students:

- 1 To assess learning achievement of students of Class V in language and mathematics.

In order to support this objective the following objectives were also planned:

- (a) to study the learning achievement of students of Class V according to
 - (i) Gender
 - (ii) Location, and
 - (iii) Caste
- (b) to study the levels of learning achievement of students of Class V according to
 - (i) Gender
 - (ii) Location, and
 - (iii) Caste

The gender indicated boys and girls (studying in Class V and Class II). The location represented the situation of the schools of rural and urban areas. The different caste groups studied were SC, ST, OBC and Others.

2. To assess the achievement of students of Class II in literacy and numeracy skills.
3. To assess dropout students for simple literacy and numeracy skills.

The Baseline Assessment Study was planned to collect bench-mark data relating to school, teachers and students. Accordingly, the following objectives were also planned.

4. To study primary schools with reference to enrolment, attendance, dropout rate, repetition and physical facilities.
5. To study teachers regarding qualification, training needs, multigrade teaching, teaching aids and supervision.
6. To study students of Class V for the home background factors.

SAMPLE DESIGN

The multistage sampling design was used in the Baseline Assessment Study. At the first stage about 20 per cent blocks (maximum up to 4) and urban areas (maximum up to 3) were selected randomly from DPEP districts according to the 1991 Census. Wherever tribal block was not included in the random selection, one tribal block was added to the sample. At the second stage, 35-45 primary schools selected randomly from rural and urban population according to the 1991 Census was the criterion for number of schools from the two areas. At the third stage, 30 students of Class V, 20 students of Class II and 5 teachers were selected randomly.

Five districts - Bilaspur (BPR), Raigarh (RGH), Rajnandgaon (RNG), Sarguja (SGJ) and Shahdol (SDL) - were selected by the State Government of Madhya Pradesh on the basis of rate of literacy as provided by the 1991 Census. The district was further subdivided into blocks for sampling purpose. Three to four blocks were selected from each district depending upon the number of blocks in a district. A look at Table 2.1 reveals that in all 17 blocks were selected for the study. Similarly, 15 urban areas were identified randomly. From the districts of Bilaspur, Sarguja, four blocks were sampled. While three blocks each were selected from Raigarh, Rajnandgaon and Shahdol.

From the districts of Bilaspur, Sarguja and Shahdol, 45 schools each were identified randomly for inclusion in the sample. In all, 177 schools were included from rural areas of the five districts. From urban areas of five districts, 37 schools were selected. The districtwise distribution of total sample according to location is presented in Table 2.1.

Table 2.1: Districtwise Distribution of Sampling Unit

| District | BPR | | RGH | | RNG | | SGJ | | SDL | | Total | |
|--|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Block | Urban Areas | Block | Urban Areas | Block | Urban Areas | Block | Urban Areas | Block | Urban Areas | Block | Urban Areas |
| Blocks/Urban Areas | 25 | 36 | 17 | 12 | 12 | 8 | 24 | 20 | 12 | 21 | 76 | 97 |
| Sampled Blocks/Urban Areas | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 17 | 15 |
| Total Number of Schools in the District | 3036 | | 1307 | | 1887 | | 3091 | | 1962 | | 11283 | |
| Sampled Schools | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| | 38 | 7 | 33 | 4 | 36 | 6 | 38 | 7 | 35 | 10 | 177 | 37 |
| % Sampled Schools to the Number of Schools in the District | 1.48 | | 2.83 | | 02.22 | | 01.46 | | 02.29 | | 01.89 | |

In all, 2432 students of Class V were included in the study from five districts. From Bilaspur 807 students were sampled while from Raigarh 299 students of Class V were sampled. The basic sampling unit was school. From each school 30 students of Class V were to be selected through a process of random start if the number of students was more than 30. All the students of Class V from a school having enrolment less than 30 were included for the study. As the number of schools from rural areas were more, so more students from rural areas were included in the study. As more boys were attending schools in all the five districts, so more boys were included in the study, except from the district of Raigarh. From Raigarh more girls (156) were included in the study than boys (143).

The number of students to be included from a school in the sample from Class II was 20 if the enrolment in a school was more than 20 through a process of random start. All the students up to 20 of a school were included in the study. More students of Class II from rural areas than urban areas were included in the study from all the five districts. The number of students of Class II from rural area varied from 541 in Bilaspur to 187 in Sarguja. The students of Class II from urban area ranged from 52 in Raigarh to 129 in Bilaspur. More boys of Class II were included in the study than girls. This shows that more number of boys was enrolled in Class II in the school than girls in all the five districts (see Table 2.2). In all, 2256 students of Class II were included in the study.

Table 2.2: Districtwise Distribution of Sample (Genderwise)

| District | ClassV | | ClassII | | Dropout | | Teachers | |
|-------------|--------|------|---------|------|---------|-----|----------|-----|
| | M | F | M | F | M | F | M | F |
| BPR | 420 | 387 | 360 | 310 | 29 | 69 | 112 | 17 |
| RGH | 143 | 156 | 163 | 153 | 28 | 38 | 74 | 15 |
| RNG | 306 | 303 | 305 | 307 | 55 | 73 | 74 | 32 |
| SGJ | 166 | 145 | 173 | 124 | 58 | 51 | 71 | 17 |
| SDL | 229 | 177 | 207 | 154 | 42 | 41 | 65 | 21 |
| Total | 1264 | 1168 | 1208 | 1048 | 212 | 272 | 396 | 102 |
| Grand Total | 2432 | | 2256 | | 484 | | 498 | |

Five dropout students from each school were expected to be included in the study. If the number was more, than dropout students were to be selected through a process of random start. If the number is less than 5 in a school, all dropout students were to be included in the sample. The dropout students were identified through school record and with the help of teachers and students. The record was not properly maintained in many schools. In many cases, the dropout students were not available at the addresses given in the school register. The field investigators in many cases followed the dropout students to place of work. More dropouts from rural areas were included in the study as shown in Table 2.3. The number of dropout students varied from 56 in Raigarh to 93 in Bilaspur and Sarguja each. Surprisingly, no dropout student was available in urban areas of Shahdol.

Table 2.3: Districtwise Distribution of Sample (Locationwise)

| District | ClassV | | ClassII | | Drop Out | | Teachers | | No. of Schools | |
|-------------|--------|-------|---------|-------|----------|-------|----------|-------|----------------|-------|
| | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| BPR | 604 | 203 | 541 | 129 | 93 | 5 | 101 | 28 | 38 | 7 |
| RGH | 221 | 78 | 264 | 52 | 56 | 10 | 75 | 14 | 33 | 4 |
| RNG | 449 | 160 | 496 | 116 | 116 | 12 | 80 | 26 | 36 | 6 |
| SGJ | 187 | 124 | 187 | 110 | 93 | 16 | 61 | 27 | 38 | 7 |
| SDL | 267 | 139 | 270 | 91 | 83 | 0 | 64 | 22 | 35 | 10 |
| Total | 1728 | 704 | 1758 | 498 | 441 | 43 | 372 | 113 | 180 | 34 |
| Grand Total | 2432 | | 2256 | | 484 | | 498 | | 214 | |

As evident from the sample of Class V and Class II students, more boys than girls attended the schools. But in case of dropout students, more girls (272) were included in the sample than boys (212). The total number of dropouts sampled from the study was 484 from rural areas and 43 from urban areas.

All the teachers including head teacher of a school up to five were to be included in the sample. If the number of teachers was more than five, four teachers (excluding head teacher) were to be selected through a process of random start. The number of teachers selected from the rural area varied from 61 in Sarguja to 101 in Bilaspur. The number of teachers identified from urban areas ranged from 14 in Raigarh to 28 in Bilaspur. More

teachers from rural areas (372) were sampled than teachers from urban areas (113). More male teachers (396) were included in the study than female teachers (102) because the number of male teachers was higher in all the schools than female teachers. In all, 498 teachers were sampled.

The blockwise distribution of sample is presented in Table 2.4.

Table 2.4: Distribution of Sample According to Block

| Districts | Blocks | Schools | Class V | Class II | Dropouts | Teacher |
|-----------|--------------|---------|---------|----------|----------|---------|
| BPR | Baloda | 6 | 104 | 85 | 11 | 14 |
| | Bilaspur | 15 | 274 | 215 | 38 | 44 |
| | Champa | 7 | 117 | 96 | 21 | 17 |
| | Dabhra | 10 | 109 | 145 | 18 | 26 |
| | Urban | 7 | 203 | 129 | 10 | 28 |
| | Total | 45 | 807 | 670 | 98 | 129 |
| RGH | Gharghoda | 9 | 55 | 78 | 18 | 18 |
| | Kansabel | 9 | 64 | 77 | 18 | 18 |
| | Kharsiya | 15 | 102 | 109 | 20 | 39 |
| | Urban | 4 | 78 | 52 | 10 | 14 |
| | Total | 37 | 299 | 316 | 66 | 89 |
| RNG | Bodla | 9 | 93 | 96 | 29 | 18 |
| | Dongargaon | 12 | 185 | 195 | 40 | 28 |
| | Kheragarh | 15 | 171 | 205 | 47 | 34 |
| | Urban | 6 | 160 | 116 | 12 | 26 |
| | Total | 42 | 609 | 612 | 128 | 106 |
| SGJ | Bhaiyathan | 9 | 38 | 36 | 19 | 11 |
| | Khargawa | 9 | 34 | 44 | 25 | 12 |
| | Lundra | 10 | 40 | 43 | 22 | 18 |
| | Wadraf Nagar | 10 | 75 | 64 | 28 | 20 |
| | Urban | 7 | 124 | 110 | 15 | 27 |
| | Total | 45 | 311 | 297 | 109 | 88 |
| SDL | Beohari | 12 | 80 | 72 | 25 | 23 |
| | Jaithehri | 13 | 108 | 109 | 39 | 25 |
| | Pali II | 10 | 79 | 89 | 19 | 16 |
| | Urban | 10 | 139 | 91 | 0 | 22 |
| | Total | 45 | 406 | 361 | 83 | 86 |

Thus, the total sample for the study was 214 schools, 2432 Class V students, 2256 students of Class II, 484 dropout students and 498 teachers.

INSTRUMENTS FOR ASSESSMENT OF LEARNING

The following tools were used for the assessment of learning

1. NCERT Language Achievement Test (LAT) for Class V.
2. NCERT Mathematics Achievement Test (MAT) for Class V.
3. NCERT Achievement Test for Class II.
- 4 NCERT Achievement Test for Dropouts.

Detailed description of each test is as follows.

1. Language Achievement Test for Class V

The Language Achievement Test (LAT) was developed by the NCERT for use in the countrywide survey on Attainment of Primary School Children. The LAT was designed to assess the level of learning of Class IV curriculum in language by students who were presently studying in Class V. The test was standardised.

Table 2.5: Profile of Language Achievement Test (LAT)

| Content Area | Description | No. of Items |
|-----------------------|------------------------------------|--------------|
| Vocabulary Control | Synonyms | 18 |
| | Antonyms | 22 |
| | Sub total | 40 |
| Comprehension of Idea | Meaning of words/phrases/sentences | 5 |
| | Factual Details | 24 |
| | Inferences | 13 |
| | Central Idea/ Title | 2 |
| | Subtotal | 44 |
| Total | | 84 |

The report on Minimum Levels of Learning (MLL) (1991) mentioned nine basic skills for language to cover the entire curriculum at the primary level. The basic skill areas are listening, speaking, reading, writing, comprehension of ideas, functional grammar, self-learning, language use and vocabulary control. Though it is difficult to demark the effect of one skill over another in language learning, a look at Table 2.5 reveals that primarily the Language Achievement Test was designed to assess the performance of students in vocabulary control and comprehension. Under the vocabulary control, 40 items were included on identification of synonyms and antonyms and 44 items on comprehension of ideas were designed to test different competencies as envisaged under MLL. Thus, in all, 84 items were included in the LAT. The test was based on competencies acquired by Class IV students.

2. NCERT Mathematics Achievement Test (MAT)

The Mathematics Achievement Test (MAT) was developed by the NCERT for use in the countrywide survey on attainment of primary school children. The MAT was designed to assess the level of learning of Class IV curriculum in mathematics who were presently studying in Class V. The test was standardised and was based on competencies of Class IV.

The profile of the MAT is presented in Table 2.6. The test comprised of 5 content areas of mathematics - whole number and numerals, addition, subtraction, multiplication and division in whole numbers, fraction, decimal and percentage and geometry. These content areas were included in the school curriculum at the primary level. The questions were designed on the basis of the competencies envisaged for each area in the Minimum Levels of Learning (1991). The test comprised of 40 items. The distribution of items for each content area is shown in Table 2.6.

Table 2.6: Profile of Mathematics Achievement Test (MAT)

| Content Area | No of Items |
|---|-------------|
| Whole Number and Numerals | 8 |
| Addition, Subtraction, Multiplication and Division in Whole Numbers | 12 |
| Simple Problems of Daily Life Relating to the Units of Money, Length, Mass, Capacity, Area and Time | 8 |
| Fraction, Decimal and Percentage | 10 |
| Geometry | 2 |
| Total | 40 |

Table 2.8: Class II Numeracy Test Profile

| Area | | Items |
|--|--|-------|
| A Recognition of Small and Large Numbers | Pairs of one digit numbers | 1 |
| | Pairs of two digit numbers | 4 |
| | Pairs of two digit and one digit numbers | 1 |
| B Addition | Addition of two one digit numbers | 2 |
| | Addition of one digit numbers with zero | 1 |
| | Addition of zero with one digit number | 1 |
| C. Subtraction | Involving two one digit numbers | 3 |
| | Involving one digit numbers | 1 |
| Total | | 14 |

4. Achievement Test for Dropouts

The Achievement Test for Dropouts was designed to assess simple literacy and numeracy skills to study level of retention of these skills.

The literacy section comprised 8 questions from the area of content, factual information and inferences. The numeracy section consisted of 8 questions from addition, subtraction and multiplication. The test profile is presented in Table 2.9.

Table 2.9: Dropout Literacy and Numeracy Test Profile

| Area | Content | Items |
|----------|--|-------|
| Literacy | Factual | 4 |
| | Inferences | 4 |
| | Total | 8 |
| Numeracy | ADDITION 1 Involving single digit numbers | 1 |
| | 2 Involving single and double digits | 2 |
| | 3 Involving two double digit numbers | 1 |
| | SUBTRACTION 1. Involving one digit numbers | 1 |
| | 2. Involving two digit numbers | 1 |
| | MULTIPLICATION 1 Involving two single digit numbers | 1 |
| | 2 Involving double digit and single digit numbers | 1 |
| | Total | 8 |

3. NCERT Class II Achievement Test

For assessing the achievement of Class II, simple literacy and numeracy tests developed by the NCERT for Primary Education Curriculum Renewal (PECR) project was used.

The literacy test profile of Class II is given in Table 2.7. A look at the table reveals that the test was comprised of two sections - letter reading and word reading. In the letter reading section there were 10 items. In the word reading section there were also 10 items. The word reading section consisted of words beginning and ending with letters without matra, word beginning with letter with matra and ending letter with matra and their permutation and combination. The maximum achievement score in this section would be 10.

Table 2.7: Class II Literacy Test Profile

| Area | | Items |
|----------------|--|-------|
| Letter Reading | Simple Letter | 9 |
| | Sanyukt (Complex) Letters | 1 |
| | Total | 10 |
| Word Reading | Words Beginning and Ending with Letter without 'matra' | 2 |
| | Word Beginning with letter without 'matra' and ending with letter with 'matra' | 1 |
| | Word Beginning with letter 'ma'-a' and ending without 'matra' | 6 |
| | Word beginning with letter 'matra' and ending with letter with 'matra' | 1 |
| | Total | 10 |

Class II numeracy test consisted 14 items in all. The first section of the achievement test consisted 6 questions on recognition of small and large number in a pair. The second section comprised of 4 questions on addition. In this section, questions were on addition of zero with one digit number. There were 4 questions on subtraction in the last third section involving two and one digit numbers. The test profile is presented in Table 2.8.

SCHEDULES FOR CONTEXT AND PROCESS

1. School Record Schedule (SR)

Information about sample school was collected through school record schedules. The SR comprised 32 items under ten subsections. The schedule covered information relating to physical facilities, teaching materials, enrolment, repetition, dropout, teachers and their training, multigrade teaching, school expenditure and school management.

2. Teacher Schedule (TS)

The schedule was used for collecting information from teachers and head teacher of the sample school. The teacher schedule consisted of 10 subsections comprising of 36 items. The teachers were interviewed by the field staff to elicit information regarding teacher characteristics, qualifications, training and experience, availability of teaching material and aids, teaching activities and supervision.

The teacher schedule also contained four subsections with 13 items exclusively for the head teacher. The field staff interviewed head teacher to collect information about responsibilities, teaching system, etc.

3. Dropout Student Schedule (SD)

The dropout students schedule was used to collect information from school dropouts (SD). The schedule comprised 19 items relating to background variables. The SD covered items seeking information for reason of leaving the school and the work in which dropout student was engaged.

4. Student Present Schedule (SP)

The student present schedule was used for interviewing the students of Class V who were administered Language Achievement Test (LAT) and Mathematics Achievement Test (MAT). The SP comprised 43 items in seven subsections. The information relating to a number of background variables of the family, economic status, preschooling, attendance, availability of learning materials, classroom transactions, school related activities at home, nutrition was collected through the schedule.

FIELD NOTES

Field Notes were designed to maintain quality of data and to control the procedure of data collection. It was to be completed by two Field Investigators. Thus in respect of a sample school, two Field Notes were prepared.

Field Notes comprised five sections besides the first page. The first page indicated identification information about the school, head teacher, supervisor, date of survey and the investigator.

Part one showed the position of the completion of the data from all the units of the sample - Class V students Schedules and Tests, Dropouts Schedule, Class II Test, Teacher Schedule, Teacher Schedule from Head Teacher and School Record.

Part two contained the procedure of random selection of students of Class V and Class II, selection of sections from Class II and Class V and details about row and columns used from the random number table. It also consisted details of the selection of dropouts - their names and addresses. The investigators were expected to write names of all the students of Class V, Class II and teachers alphabetically. All the information about the selection procedure of the sample and the use of random numbers was checked by the Field Supervisor during his visit to the school. The Field Investigators got the Field Notes checked at the camp office daily in the evening.

Part three was related to the school records. All the qualitative information relating to the general information, enrolment of students, teachers, Operation Blackboard, physical facilities and finances was to be reported in this section.

Part four of the Field Notes was designed to record the observations of the Field Investigators during the process of test administration and interviews of Class V students. As it was envisaged that students might not understand the example and might not have attained the ability to read questions, the Investigators were expected to report about it in the Field Notes for subsequent verification by the Field Supervisor, District Supervisor or State Coordinator.

The position of the literacy and numeracy skills was to be ascertained in case of dropouts. The Investigators were expected to report about their observations related to the dropouts in the Field Notes. Similarly for Class II students also the observation of the Field Investigators about literacy and numeracy skills were recorded in the Field Notes.

The Field Notes was an open-ended questionnaire where information about quality of data was recorded. It also contained two sets of random number table. Blank pages were also included in the Field Notes to record observations. Finally, all the Investigators were asked to record the attendance of all the classes during the three-day visit of the school.

The information about quality of data has been incorporated at the appropriate place.

STATISTICAL ANALYSIS

In order to realise objectives of the study, statistical methods were used to analyse the data to facilitate interpretation. The statistical methods were selected on the basis of the requirement of the data. The district was taken as a unit for the analysis. Most of the objectives of the study required comparison between the groups. Taking assumption of statistical methods into consideration percentages were calculated.

The tables of the data were prepared to facilitate presentation. Graphical representation of the data was designed to facilitate interpretation. Means and Standard Deviations were calculated. The 't' test was used to arrive at inferences. The level of significance is taken as 0.05 throughout the report.

CHAPTER 3

FIELD WORK

This chapter presents the procedure followed in the field for the conduct of the Baseline Assessment Study in the five districts of Madhya Pradesh. The procedure deals with the recruitment, training and deployment of the field staff. The procedure of test administration and data management is also discussed here.

RECRUITMENT OF THE FIELD STAFF

The field staff - Field Supervisor and Field Investigators - was recruited through open advertisement. The advertisement for the selection of five field supervisors and 42 field investigators was designed by the State Council of Educational Research and Training (SCERT), Madhya Pradesh, Bhopal. The newspaper of Chattisgarh region, Dainik Nav Bharat, carried the advertisement simultaneously in its Bilaspur and Raipur editions. The candidates were invited to attend the interview at the Government College of Education, Bilaspur. About 104 candidates appeared before the interview board constituted by the SCERT, Madhya Pradesh, Bhopal. The State Coordinator for Chattisgarh region was the convenor of the selection committee. The list of selected candidates was displayed on the notice board of the venue on the same day at 5.00 p.m. The candidates were asked to report for duty on 27 January 1994 for the training purpose.

Due care was taken to select only those candidates who had flair for the survey work and/or qualification in education. The knowledge of cycling was essential for the field staff as they were expected to go interior into the district where the sample school was situated.

The minimum educational qualification for the field supervisor was postgraduate in any subject with a degree/diploma in education. The minimum academic qualification for the field investigator was graduate with a degree/diploma in education. The candidates with the experience of field work were preferred. The field staff was selected for three months only on a temporary basis.

The field staff was also recruited at the headquarters - Department of Teacher Education and Special Education, National Institute of Education, NCERT, New Delhi. The minimum qualification was postgraduate degree in education. The field staff selected at the headquarter was designated as District Supervisor or Professional Assistant.

The basic philosophy behind two-tier selection was to conduct the survey smoothly and efficiently. The field staff recruited from the survey district would be familiar from the local geography and dialect while the field staff recruited at Delhi would be efficient in monitoring and maintaining rigour in the study.

TRAINING OF THE FIELD STAFF

The training of the field staff was structured. A training manual was designed for Baseline Assessment Study (BAS) under DPEP. The manual has seven modules and seven training notes. The modules covered the following areas:

- Objectives and scope of the study
- Design and procedure: Tools for data collection
- Field work
- Field responsibilities
- Field tryout
- Team work and field simulation
- Administrative procedures and reporting.

The training notes were designed to clarify the field situations and equip field staff with the answers of the general questions. The training notes covered the following topics:

- The study
- DPEP - Outline of Baseline Assessment Study
- Multistage sampling design
- General principles of filling up schedules
- Dropout Students Schedule (SD) data
- School Record (SR) data
- Administration of tests

The modules and notes comprised several sections to be completed in the ten days' duration of the training programme. The purpose, objectives, content, methodology, expected learning outcomes were broadly given in the manual. The copy of training manual along with the schedules were supplied to all the trainees in a kit.

The training was organised in a participatory mode. Role play in simulated situation was used frequently. Assignments were given extensively.

The training programme of ten days' duration under the Baseline Achievement Study was held from 27 January to 5 February 1994 at the Government College of Education, Bilaspur. Participants in the training included Field Investigators, District Supervisors, Professional Assistants of NCERT, members of the DIET Faculty, Block Education Officers and Deputy Directors of Education.

The programme commenced on 27 January 1994. On the very first day, the objectives and the scope of the DPEP were explained to the participants. Each Investigator and Supervisor got acquainted with the districts of survey with the block and the code number.

The codes of the districts with the blocks were given to all the participants. The schedules with their codes according to rural and urban distribution were also given.

On the second day of the training, the Achievement Test of Class V was demonstrated. It was also discussed to make scaling arrangement and establish rapport with the students. The questionnaires of both language and mathematics were of close-end type. Some of the participants were also asked to demonstrate the procedure. They were assigned the role of students and investigator to practice in the simulated situation.

The Student Present Schedule (SP) was demonstrated on the third day. It deals with every aspect of the students' facilities in school, family and interest studies. An interview is taken from the students about their daily routine from the time they wake up till they go to bed. It is then tallied with the tabulation made according to the time they spend for the various categories of domestic duties, homework, watching TV, listening to radio and playing, etc. It is also noted if the students are staying away for any kind of paid work and the number of days of absence with reasons are also noted.

The fourth day training was given in interviewing the dropouts. The procedure of selection of dropout was also explained in detail. In the schedule efforts were made to reason out for the dropout and also whether they have any further interest in studies. After the interview a short test in language and mathematics is to be administered to them to detect their level of achievement.

In the second half Class II achievement test was demonstrated and the participants were also asked to demonstrate the same in the class. The Teacher Schedule (TS) was discussed on the fifth day of the programme. The foremost aspect of the schedule is the coding assigned to the head teacher and other teachers. The schedule maintains a detailed study of the teacher's/head teacher's age, marital status, number of children, his/her attitude to educating his/her children, their training and qualification, family condition and the literacy status of his/her family, interest in the profession, facilities and usage of the same and ability in administration and the amount of cooperation he/she get from other sources, teachers' category, and the time they spend for preparation, meeting with parents, etc. Teachers' views are also noted down in the schedule. An interview of the head teacher was taken separately.

On the sixth day the most important schedule, i.e. the School Record was discussed. Various cross-checkings in question numbers were explained to them and the procedure and formula were provided. The schedule observes the Indian Standard time, i.e. 13.00, 14.00 from 12.00 onwards. The school facilities, furniture, playground, mid-day meal, books, etc. have to be noted down along with any other special information in the Field Notes provided for every school.

On the seventh day the random sampling was taught to the participants which was to be applied for Class V and Class II teachers and dropouts. A table was provided at the back of every Field Note so that no preference of students are made. The interview of head teacher, Class I/II teachers, Class IV/V teachers was essential for the study. The students and teachers had to be selected randomly after arranging their names alphabetically.

The procedure of completing Field Notes was also discussed in detail. The teams were sent for field training on the eighth and ninth day. In the evening on each day participants scrutinised the schedules completed by them during the day. The District Supervisors and Professional Assistants were provided special training to supervise and also to do the scrutiny of the schedule.

All the Investigators, Supervisors, DIET faculty members and the Professional Assistants were divided into a group of two for each team and sent to various rural/urban schools for data collection.

The prescribed schedule for the practical work is shown in Table 3.1. During field training a team was expected to collect data from 10 Class V students, 10 Class II students, 3 teachers and 2 dropout students. The team was expected to complete one School Record and one Field Note.

Table 3.1. Sample for Training Situation and Actual Situation

| S.No. | Description | Training N | Actual N |
|-------|--|------------|----------|
| 1 | Student Present Schedule Class V (SP) | 10 | 30 |
| 2 | Language Achievement Test Class V (LAT) | 10 | 30 |
| 3 | Mathematics Achievement Test Class V (MAT) | 10 | 30 |
| 4 | Achievement Test Class II | 10 | 25 |
| 5 | Dropout Students Schedule (SD) | 2 | 5 |
| 6 | School Record (SR) | 1 | 1 |
| 7 | Teacher Schedule (TS) | 3 | 5 |
| 8 | Field Notes | 1 | 2 |

On the tenth day all final teams completed the scrutiny of schedules. The participants were asked to clarify all doubts about the study. The teams were formed for each districts. The plan for conducting the survey was given to each team.

Thus the training programme covered the purpose, design, procedure of baseline assessment study (BAS), sample of students and teachers in school, field experiences using schedules and interview and deployment plan. The training was conducted in participatory mode with individual and group work, discussion, practice in use of techniques through role play and in simulated situation, and practice in the field followed by discussion. The field training was organised in the same way as the teams were expected to collect data for the study.

The Block Education Officers and the Deputy Directors were explained the purpose of the study and procedure of the study. They were also requested to extend all necessary cooperation for this survey.

DEPLOYMENT SCHEME

The field team for each district was organised into four teams of two field investigators each along with a field supervisor. The field team of each district was supported by a District Supervisor or Professional Assistant. The five teams remained with the State Coordinator in the field throughout the period of data collection.

The field supervisor was expected to supervise the survey work in the school. The team of two investigators was assigned the task of data collection from the sample school. The District Supervisor was responsible for scrutiny of the data at the district headquarters, rectification of errors noticed during the data collection and maintain liaison with the field staff and the State Coordinator.

As per the deployment scheme the survey was expected to start with all the five districts from 7 February 1994. But it was discovered that the State Government had not supplied the list of primary schools of Rajnandgaon and Shahdol districts. The State Coordinator pursued the matter with the district level officials of education to supply the list of primary schools of sample blocks from these districts.

The deployment scheme was then replanned. The teams of districts earmarked for Bilaspur and Rajnandgaon were deployed in Bilaspur district. The teams of Sarguja and Shahdol districts were sent to start the field work in Sarguja district. The teams for Raigarh district started the work as per the original schedule. Thus eight teams each were assigned the task of data collection from the districts of Bilaspur and Sarguja as per the modified plan.

Each team was expected to visit a sample school for three days continuously and collect the data. Thus entire survey work in one block was to be completed in all respects before moving to another block. The headquarter of the District Supervisor was the block of the District. In order to work vigorously, the District Supervisor also visited the specific sample school while the Field Supervisor continuously moved from one school to another during each day of data collection

The list of schools from Rajnandgaon and Shahdol was procured and a sample was drawn. The field team at Sarguja was supplied the list of sample schools of Shahdol and they were directed to report directly to Shahdol district to commence the survey work. The field team at Bilaspur was supplied the list of sample schools of Rajnandgaon. They were asked to mount survey work in that district.

In spite of all problems, the field work was completed as per the schedule by 30 April 1994.

TEST ADMINISTRATION AND COMPLETION OF SCHEDULES

The administration of achievement test to Class V children was most crucial for the study. Special care was taken to ensure that achievement tests were administered properly according to the guidelines and standard procedure. At the initial stage all the field staff was properly oriented and trained towards the test administration. Before the administration of the test, the investigator ensured the correct and complete information relating to name, ID code, age, sex, caste, etc. The students were provided practice on the items given in the instruction of the test. All the answers of the questions asked by the students were given by the investigators. The doubts were cleared and in this process a rapport was established with the students. The investigators and supervisor were instructed to take care of the following points:

- The students were selected randomly and the process of selection was not influenced by the teachers.
- The students were made to sit properly as per the direction and the teachers were not present during the process of test administration.
- The students were provided enough time to understand the example.
- It was ensured that students had followed all instructions relating to the process of answering the questions.
- It was also ensured that no cheating or copying should take place.
- There was no interruption and distraction.
- As no time limit was fixed for the completion of the test, it was to be ensured that enough time was given to the students to complete the test. If a student had not begun or stopped mid way, he/she was to be encouraged to proceed by reading the question and directing him/her to find the answer.

The Student Present Schedule was to be completed through interview of students of Class V by both the investigators. The investigators were expected to make sure that all the information desired on each and every item of the schedule was responded by the student and the same is recorded correctly in the schedule.

The Class II Students Achievement Test was also completed by the investigator through interviewing.

The dropout student was interviewed on the item of the schedule. Due care was taken to identify the dropout students

The teacher and the head teacher were pursued to answer all the questions of the teacher schedule.

The School Record Schedule (SR) was to be completed with the help of school registers. It was time consuming. The investigators were specifically oriented to extract information from the various records. The teachers and head teachers were also consulted to complete the schedule.

Due care was taken by the investigators to ensure that no column was left blank in any schedule

DATA MANAGEMENT

The quality of data was ensured through the following steps specially planned for this purpose:

1. Cross-checks of schedules.
2. Scrutiny of data at various points of collection.
3. Field visit by the Field Supervisor, District Supervisor and State Coordinator.

The information provided by the students, teachers, head teachers was cross-validated. The items in the schedules were structured accordingly for this purpose. The Field Supervisor was informed to carry out exercise at the first point of collection of the data. The District Supervisor also repeated the same exercise in order to validate the data for its correctness and completeness.

The schedules were scrutinised to ascertain quality and completeness at various points. At the first stage each team of investigators scrutinised the schedules each day at the end of the work in the school during the period when data collection was in progress. During the process if any investigator forgot to fill the schedule or did not collect the requisite information, the same was procured on the next day of the school visit for data collection.

The Field Supervisor also carried out scrutiny of the schedules when these were handed over to him at the end of a cycle of three-day visit to a sample school. The procedure of scrutiny was laid down in the field handbook, copies of which were made available to all the field staff.

The scrutiny covered the following points:

1. Checking the number of schedules and test booklets against the issue sheet/issue register.

2. Checking of the procedure of random selection of students and teachers, where applicable.
3. Checking of the status code of schedule.
4. Checking of the test booklets and students schedule matching.
5. Cross-checking of all codes entered on response sheets with the written responses noted on the left hand side of the sheets of schedule.
6. Cross-checking of the status code of the students of Class V from the Field Notes.
7. Checking of validity codes - code range, alpha and numeric codes and interdependence of variables.
8. Checking of totals, accuracy of conversions, checking of reference periods.
9. Checking of ranking.

The District Supervisor also carried out scrutiny at his headquarters when the schedules were received by him from the Field Supervisor. The cross-validation was also ensured by him. Each schedule was provided a column for this purpose to indicate the status of scrutiny. This was done to ensure that mistake or inconsistency in any schedule was corrected at the field stage of the data collection.

The final stage of scrutiny was carried out at the head office before sending the schedules for data processing.

Thus each and every entry of the schedule was scrutinised by the field supervisor, district supervisor and team at headquarters. The scrutiny teams were provided different code numbers and pens of different colours to ensure the correct procedure of scrutiny. The State Coordinator supervised the work at various stages of scrutiny.

The quality of data was also assured through the continuous visits of the field supervisor and district supervisor while the field work was in progress. The State Coordinator assessed the quality control of the data through visits to schools. The reading levels of Class II students and achievement test of Class V students and school records were evaluated on the spot in schools. The field work was continuously monitored at every stage by the State Coordinator.

DATA PROCESSING

The schedules were dispatched to the computer centre for data entry, verification and double entry immediately after the scrutiny at the head office. The raw data was transferred to floppies to create data files.

Seven data files prepared for seven schedules and tests. Standard Software (SPSS) was used for data entry and processing. Special programme was used for verification, range checks and validation. Students, teachers and schools were identified by separate codes

Separate codes were also used for block, district and school. The data files were thus ready for analysis at different levels at the same time aggregating for further analysis if need arises.

The data files were verified in order to validate the transfer of data before going for final analysis. Double entry of the data was done as a measure of verification. All the data was entered in the computer again. Errors on the second entry was caught by Double Entry Programme. The following checks were carried out to validate entries:

1. *Batch checks*: the first set of checks received through double entry was in the form of Batch Reports. These reports comprised identity codes, matching schedules to schools, tests of students, etc. This quickly cross-checked the totals of all the data. Deviations were corrected immediately.
2. *Range checks*: Range of each variable was checked with respect of each schedule. The schedules and Field Notes were referred for correction in raw data files. The procedure was repeated till all the errors were corrected
3. *Consistency check*: Inter Schedule and Intra Schedule consistencies were identified for scrutiny. The list was provided to the computer centre to cross-check validity of the data to establish the quality. A programme was drawn and run to find inconsistencies. The mistakes were reconciled by checking the schedules and field notes. Corrections were incorporated in the original data file.

CHAPTER 4

THE SCHOOLS

The data from 214 schools was collected from the districts of Bilaspur, Sarguja and Shahdol forty five schools were randomly selected for data collection. The number of schools selected from Raigarh and Rajnandgaon was 37 and 42, respectively. The information collected from schools covered physical facilities, teaching material, enrolment, dropouts, multigrade teaching and school management. The data was tabulated and analysed. Results with data are presented in this chapter.

BACKGROUND OF SCHOOLS

The background of the school covered the following:

1. Location of the School - Rural or Urban
2. Age of the school in years
3. Pre-school facility - with preschool or Anganwadi/Balwadi or LKG/UKG
- 4 Highest class - Class V or other higher classes
- 5 School management - Panchayat/State Government or Municipality or private.

In Bilaspur, 84.4 per cent schools were selected from the rural area while 15.6 per cent schools were selected from the urban area according to the proportion of population. The sample comprised 89.2 and 10.8 per cent schools from rural and urban area, respectively from the district Raigarh. From Shahdol, 77.8 and 22.2 per cent schools were selected randomly from rural and urban area, respectively. A look at Table 4.1 reveals that about 85 per cent schools were selected from the rural area of Rajnandgaon and Sarguja.

From the urban area the lowest number of schools was drawn in the sample from Raigarh while the highest number of schools were included from Shahdol according to percentage representation.

About five per cent schools included in the study from Bilaspur, Sarguja and Shahdol were more than fifty years old. This shows that these schools were established in the forties. About ninety per cent primary schools were established more than ten years ago. This shows that a rapid expansion of primary schools has taken place in these districts after independence. About five per cent schools are less than ten-year old. This shows that the pace of opening primary schools has been very slow during the last ten years. (Table 4.1)

About ten per cent primary schools were with preschool facility in the districts of Bilaspur, Rajnandgaon and Sarguja. Raigarh had the highest number of schools (43.2 per cent) with the preschool facility.

Shahdol had the lowest percentage of schools with preschooling facility. Balwadis or Anganwadis were available in all the districts except Raigarh. The percentage of Balwadis or Anganwadis was very less in Bilaspur (6.7), Rajnandgaon (9.5), Sarguja (2.3) and Shahdol (2.2).

The system of kindergarden was available in the schools of Rajnandgaon only. LKG or UKG classes were found in 2.4 per cent schools.

From the above discussion it may be concluded that the facility of preschool education should be created in all the primary schools of the five districts.

Table 4.1: Background Features of the Sample Schools (in per cent)

| Description | BPR | RGH | RNG | SGJ | SDL |
|-------------------------|--------|--------|--------|--------|--------|
| Location of Schools | | | | | |
| Rural | 84.40 | 89.20 | 85.70 | 86.40 | 77.80 |
| Urban | 15.60 | 10.80 | 14.30 | 13.60 | 22.20 |
| Age of the School | | | | | |
| Over 50 | 04.40 | 02.70 | 07.20 | 04.60 | 04.40 |
| 10 - 50 | 86.80 | 91.90 | 85.60 | 91.10 | 89.00 |
| Under 10 | 08.80 | 05.40 | 07.20 | 04.30 | 06.60 |
| Preschool Facility | | | | | |
| With Preschool | 11.10 | 43.20 | 14.30 | 09.10 | 00.00 |
| With Aanganwadi/Balwadi | 06.70 | 00.00 | 09.50 | 02.30 | 02.20 |
| With LKG/UKG/Other | 00.00 | 00.00 | 20.40 | 00.00 | 00.00 |
| Highest Class | | | | | |
| Class V | 100.00 | 100.00 | 100.00 | 100.00 | 97.80 |
| Class V and above | 00.00 | 00.00 | 00.00 | 00.00 | 02.20 |
| School Management | | | | | |
| Panchayat/State Govt | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Municipality | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| Private | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |

All the schools included in the study from the districts of Bilaspur, Raigarh, Rajnandgaon and Sarguja had the highest class as Class V. About two per cent schools had higher class than Class V in the district of Shahdol.

All the schools included in the study were managed by the State Government as indicated in Table 4.1

ENROLMENT

Classwise data of enrolment from each school was collected to know the position in these districts. The data was analysed according to gender, location and caste. The percentages were calculated to facilitate interpretation.

Enrolment - Genderwise

The enrolment of students from Class I to V is presented in Tables 4.2 and 4.3.

The total enrolment of sampled schools during the year 1994 is also shown in Table 4.3 according to gender. The enrolment in all the 45 schools of Bilaspur was 7035 which was the highest. In the sample 45 primary schools were also identified randomly from the districts of Sarguja and Shahdol. But comparatively the enrolment was not as high as that of the district Bilaspur.

The percentage enrolment in Class I to V according to gender is presented in Table 4.2. It is evident from the data that more girls were enrolled in all the classes than boys in districts Raigarh and Rajnandgaon. In Raigarh the ratio of enrolment between girls and boys was 54 to 46 while in Rajnandgaon the ratio between girls and boys was 52 to 48. In Bilaspur the ratio was 49 to 52. The ratio of enrolment between girls and boys was 39 to 61 in Sarguja. Similarly in Shahdol also the ratio between boys and girls was 44 to 56. In both the districts the enrolment was adverse for girls.

From the above discussion it may be concluded that in Bilaspur, Sarguja and Shahdol more boys were enrolled than girls. This shows sex bias of the society in these districts. In Raigarh and Rajnandgaon more girls were enrolled than boys in the schools in all the classes from I to V. From the Census data of 1991 the ratio of male and female may be seen for further clarification of these two districts.

A clear-cut pattern of dropouts from boys and girls is also visible in these Tables. The enrolment is decreasing from Class I to V sharply. The enrolment of girls has decreased almost fifty per cent from Class I to V in the districts of Raigarh, Sarguja and Shahdol. One out of every two girls enrolled in Class I reached Class V. Two out of three girls enrolled in class I reached Class V in Bilaspur and Rajnandgaon. The boys have enrolled less in number in Class V in comparison to Class I.

Tables 4.2: Percentage Enrolment (1994) in Schools (Genderwise)

| Districts | Class | Boys | Girls |
|-----------|-------|-------|-------|
| BPR | I | 50.60 | 49.40 |
| | II | 52.20 | 47.80 |
| | III | 54.30 | 45.70 |
| | IV | 49.40 | 50.60 |
| | V | 51.40 | 48.60 |
| | Total | 51.50 | 49.50 |
| RGH | I | 43.70 | 56.30 |
| | II | 47.30 | 52.70 |
| | III | 43.70 | 56.30 |
| | IV | 47.30 | 52.70 |
| | V | 47.40 | 52.60 |
| | Total | 45.60 | 54.40 |
| RNG | I | 46.90 | 53.10 |
| | II | 48.20 | 51.80 |
| | III | 48.90 | 51.10 |
| | IV | 49.40 | 50.60 |
| | V | 49.90 | 50.10 |
| | Total | 48.50 | 51.50 |
| SGJ | I | 63.10 | 36.90 |
| | II | 58.70 | 41.30 |
| | III | 59.30 | 40.70 |
| | IV | 62.90 | 37.10 |
| | V | 63.10 | 36.90 |
| | Total | 61.30 | 38.70 |
| SDL | I | 54.60 | 45.40 |
| | II | 56.20 | 43.80 |
| | III | 56.20 | 43.80 |
| | IV | 57.40 | 42.60 |
| | V | 55.20 | 44.80 |
| | Total | 55.90 | 44.10 |

Table 4.3: Enrolment (1994) in Schools (Genderwise)

| Districts | Class | Boys | Girls | Total |
|-----------|-------|------|-------|-------|
| BPR | I | 853 | 831 | 1684 |
| | II | 665 | 608 | 1273 |
| | III | 683 | 574 | 1257 |
| | IV | 729 | 746 | 1475 |
| | V | 692 | 654 | 1346 |
| | Total | 3622 | 3413 | 7035 |
| RGH | I | 344 | 442 | 786 |
| | II | 274 | 305 | 579 |
| | III | 246 | 317 | 563 |
| | IV | 228 | 253 | 481 |
| | V | 189 | 210 | 399 |
| | Total | 1281 | 1527 | 2808 |
| RNG | I | 570 | 646 | 1216 |
| | II | 561 | 604 | 1165 |
| | III | 511 | 533 | 1044 |
| | IV | 494 | 505 | 999 |
| | V | 426 | 428 | 854 |
| | Total | 2562 | 2716 | 5278 |
| SGJ | I | 581 | 339 | 920 |
| | II | 405 | 286 | 691 |
| | III | 525 | 359 | 884 |
| | IV | 449 | 265 | 714 |
| | V | 302 | 176 | 478 |
| | Total | 2262 | 1425 | 3687 |
| SDL | I | 684 | 568 | 1252 |
| | II | 401 | 313 | 714 |
| | III | 403 | 304 | 707 |
| | IV | 418 | 310 | 728 |
| | V | 353 | 286 | 639 |
| | Total | 2259 | 1781 | 4040 |

The decrease of enrolment from Class I to V is visible in all the classes in all the districts.

Enrolment - Locationwise

The enrolment of students during the year 1994 in the five sampled districts is given in Table 4.5 according to location. A glance at the Table reveals that more students were enrolled in the schools of the rural area than that of the urban area. This is because more schools were randomly selected from the rural area than the urban area. The ratio of selection of the schools from rural and urban areas was based on the distribution of population in these areas according to 1991 Census.

The percentage distribution of enrolment from Class I to V is shown in Table 4.4 according to location for each district. The percentage of enrolment in rural areas varied from 67.8 in Class V to 79.7 in Class I in Bilaspur district. The percentage of population distribution in rural and urban areas was 83 to 17 according to 1991 Census. On comparison of percentage of enrolment and population from the rural area, it is revealed that less enrolment is in schools (74.5 per cent) than the population (83%) residing in the rural area of Bilaspur. Less population is residing in urban area (17%) while the enrolment in school is more.

In Raigarh the rural-urban ratio in population was 90 to 10 while the rural-urban ratio in enrolment at school was 78 to 22. In Rajnandgaon the population distribution in the rural-urban areas was 85 to 15. The corresponding enrolment percentage was 67 to 33. The percentage ratio between rural and urban areas was 88 to 12 in Sarguja. The enrolment in schools in rural and urban areas was 73 to 27. In Shahdol the population in rural and urban areas was 79 to 21 while the enrolment percentage was 71 to 29.

From the above discussion, it may be concluded that more per cent of students from urban population were enrolled in primary schools from Class I to V in all the districts.

The percentage of enrolment has declined from 79.7 in Class I to 67.8 in Class V in rural areas of Bilaspur while the percentage of student enrolment has enhanced from 20.3 in Class I to 32.2 in Class V in urban areas of Bilaspur. Similar trend is visible in all other districts. The enrolment has declined in rural areas while it has enhanced in urban areas from Class I to V.

The probable reason for this phenomenon may be that students have been dropping out from rural schools continuously from Class I to Class V which resulted in fall in the percentage. In the other case migration of parents from rural to urban area might have resulted in the enhancement of enrolment from Class I to V. The other reason may be that the students from other schools in the same locality of the urban area have got themselves enrolled in government primary schools.

Table 4.4: Percentage Enrollment (1994) in Schools (Locationwise)

| Districts | Class | Rural | Urban |
|-----------|-------|-------|-------|
| BPR | I | 79.70 | 20.30 |
| | II | 77.20 | 22.80 |
| | III | 74.50 | 25.50 |
| | IV | 72.50 | 27.50 |
| | V | 67.80 | 32.20 |
| | Total | 74.50 | 25.50 |
| RGH | I | 77.60 | 22.40 |
| | II | 78.90 | 21.10 |
| | III | 78.30 | 21.70 |
| | IV | 78.80 | 21.20 |
| | V | 75.70 | 24.30 |
| | Total | 77.90 | 22.10 |
| RNG | I | 69.10 | 30.90 |
| | II | 67.60 | 32.40 |
| | III | 66.90 | 33.10 |
| | IV | 66.30 | 33.70 |
| | V | 63.50 | 36.50 |
| | Total | 66.90 | 33.10 |
| SGJ | I | 72.30 | 27.70 |
| | II | 73.60 | 26.40 |
| | III | 69.20 | 30.80 |
| | IV | 71.90 | 28.10 |
| | V | 64.40 | 35.60 |
| | Total | 72.60 | 27.40 |
| SDL | I | 75.50 | 24.50 |
| | II | 72.30 | 27.70 |
| | III | 71.40 | 28.60 |
| | IV | 70.70 | 29.30 |
| | V | 71.10 | 28.90 |
| | Total | 70.50 | 29.50 |

From the above discussion it may be concluded that there is a continuous decline in enrolment from Class I to V in rural areas of all the districts. The enrolment is continuously increasing from Class I to V in urban areas of all the districts.

Table 4.5: Enrolment (1994) in Schools (Locationwise)

| Districts | Class | Rural | Urban |
|-----------|-------|-------|-------|
| BPR | I | 1343 | 341 |
| | II | 983 | 290 |
| | III | 936 | 321 |
| | IV | 1069 | 406 |
| | V | 906 | 430 |
| | Total | 5237 | 1788 |
| RGH | I | 610 | 176 |
| | II | 457 | 122 |
| | III | 441 | 122 |
| | IV | 379 | 102 |
| | V | 302 | 97 |
| | Total | 2189 | 619 |
| RNG | I | 840 | 376 |
| | II | 788 | 377 |
| | III | 6991 | 345 |
| | IV | 662 | 337 |
| | V | 542 | 312 |
| | Total | 3531 | 1747 |
| SGJ | I | 666 | 254 |
| | II | 508 | 183 |
| | III | 681 | 203 |
| | IV | 514 | 200 |
| | V | 308 | 170 |
| | Total | 2677 | 1010 |
| SDL | I | 959 | 293 |
| | II | 516 | 198 |
| | III | 505 | 202 |
| | IV | 515 | 213 |
| | V | 454 | 285 |
| | Total | 2849 | 1191 |

Enrolment - Castewise

The enrolment of students in schools during the year 1994 is presented in Table 4.7 according to caste. The enrolment is not according to the population percentage of SC and ST in these districts according to the 1991 Census. The percentage of enrolment of students from Class I to V is shown in Table 4.6

Table 4.6: Percentage Enrolment of Students (1994) in Schools (Castewise)

| Districts | Class | SC | ST | OBC | Others |
|-----------|-------|-------|-------|-------|--------|
| BPR | I | 27.70 | 13.30 | 50.50 | 08.50 |
| | II | 24.60 | 14.20 | 51.70 | 09.50 |
| | III | 24.20 | 11.70 | 50.50 | 13.60 |
| | IV | 22.10 | 11.50 | 52.90 | 13.50 |
| | V | 20.40 | 11.20 | 51.20 | 17.20 |
| | Total | 23.90 | 12.40 | 51.30 | 12.40 |
| RGH | I | 13.80 | 40.80 | 41.70 | 03.70 |
| | II | 10.20 | 45.60 | 39.40 | 04.80 |
| | III | 12.10 | 35.90 | 47.90 | 04.10 |
| | IV | 12.90 | 39.50 | 42.40 | 05.20 |
| | V | 10.80 | 34.30 | 48.90 | 06.00 |
| | Total | 12.10 | 39.70 | 43.60 | 04.60 |
| RNG | I | 09.29 | 12.75 | 73.44 | 04.52 |
| | II | 10.90 | 12.96 | 69.36 | 06.78 |
| | III | 09.20 | 11.30 | 71.60 | 07.90 |
| | IV | 08.70 | 11.30 | 71.30 | 08.70 |
| | V | 08.80 | 12.50 | 67.30 | 11.40 |
| | Total | 09.40 | 12.20 | 70.80 | 07.60 |
| SGJ | I | 08.70 | 47.30 | 36.40 | 07.60 |
| | II | 06.90 | 48.60 | 36.70 | 07.80 |
| | III | 11.40 | 46.80 | 35.40 | 06.40 |
| | IV | 08.40 | 40.60 | 40.10 | 10.90 |
| | V | 12.10 | 37.70 | 36.40 | 13.80 |
| | Total | 09.30 | 45.00 | 36.90 | 08.80 |
| SDL | I | 08.90 | 53.20 | 23.50 | 14.40 |
| | II | 08.80 | 44.70 | 28.00 | 18.50 |
| | III | 09.00 | 41.00 | 26.60 | 23.30 |
| | IV | 08.90 | 38.30 | 30.30 | 22.40 |
| | V | 08.80 | 35.10 | 30.80 | 25.10 |
| | Total | 08.90 | 44.00 | 27.20 | 19.90 |

It is revealed from Table 4.6 that the percentage enrolment has declined from Class I to V for SC and ST in all the districts. The percentage of SC students from Bilaspur varied from 28 in Class I to 20 in Class V. The percentage of ST students from the same district ranged from 13.3 in Class I to 11.2 in Class V.

The students from Class I to V from OBC and Others indicated a different trend. The percentage enrolment of OBC varied from 50.5 in Class I to 51.2 in Class V in district Bilaspur. The percentage enrolment of Others ranged from 8.5 in Class I to 17.2 in Class V in district Bilaspur. Similar trend is visible in Raigarh, Rajnandgaon, Sarguja and Shahdol.

Table 4.7: Enrolment of Students (1994) in Schools (Castewise)

| Districts | Class | SC | ST | OBC | Others |
|-----------|-------|------|------|------|--------|
| B P R | I | 466 | 224 | 850 | 144 |
| | II | 313 | 181 | 658 | 121 |
| | III | 306 | 148 | 639 | 172 |
| | IV | 326 | 170 | 780 | 199 |
| | V | 274 | 151 | 689 | 232 |
| | Total | 1685 | 874 | 3616 | 868 |
| R G H | I | 109 | 321 | 328 | 28 |
| | II | 59 | 264 | 228 | 28 |
| | III | 68 | 202 | 270 | 23 |
| | IV | 62 | 190 | 204 | 25 |
| | V | 43 | 137 | 195 | 24 |
| | Total | 341 | 1114 | 1225 | 128 |
| R N G | I | 113 | 155 | 893 | 55 |
| | II | 127 | 151 | 808 | 79 |
| | III | 95 | 118 | 748 | 83 |
| | IV | 87 | 113 | 712 | 87 |
| | V | 75 | 107 | 575 | 97 |
| | Total | 497 | 644 | 3736 | 401 |
| S G J | I | 80 | 435 | 335 | 70 |
| | II | 48 | 336 | 254 | 53 |
| | III | 98 | 413 | 311 | 56 |
| | IV | 60 | 290 | 286 | 78 |
| | V | 58 | 180 | 174 | 66 |
| | Total | 344 | 1654 | 1360 | 323 |
| S D L | I | 111 | 666 | 294 | 181 |
| | II | 63 | 319 | 200 | 132 |
| | III | 64 | 290 | 188 | 165 |
| | IV | 65 | 279 | 221 | 163 |
| | V | 56 | 224 | 197 | 162 |
| | Total | 359 | 1778 | 1100 | 803 |

From the above discussion it may be concluded that the enrolment of student has declined from Class I to V in all the districts for SC and ST. The enrolment of students has enhanced from Class I to V in all the districts for OBC and Others. The phenomenon is unique in the sense that these castes (OBC and Others) have maintained the enrolment from Class I to V in the school. The increase in number may be attributed to the transfer or shifting from one school to another.

ATTENDANCE

The attendance of students of Class II and Class V on the days of survey is presented in Table 4.8.

Table 4.8: Comparison of Number of Students on Rolls and Present on the Date of Survey(DOS)

| Districts | | Class V | | Class II | |
|-----------|-------|---------|----------------|----------|----------------|
| | | On Roll | Present on DOS | On Roll | Present on DOS |
| BPR | Boys | 692 | 420 (60.69) | 665 | 360 (54 14) |
| | Girls | 654 | 387 (59.17) | 608 | 310 (50 99) |
| RGH | Boys | 189 | 143 (75 66) | 274 | 163 (59.49) |
| | Girls | 210 | 156 (75.29) | 305 | 153 (50 16) |
| RNG | Boys | 426 | 306 (71.83) | 561 | 305 (54.37) |
| | Girls | 428 | 303 (70.79) | 604 | 307 (50 83) |
| SGJ | Boys | 302 | 166 (54.97) | 405 | 173 (42 72) |
| | Girls | 176 | 145 (83 39) | 286 | 124 (43 36) |
| SDL | Boys | 353 | 229 (64.88) | 401 | 207 (51 62) |
| | Girls | 286 | 177 (61 89) | 313 | 154 (49 20) |

**Figures in parenthesis indicate percentage*

In the Sarguja district 73 per cent schools had time table but only 30 per cent followed it.

Surprisingly, in Shahdol only 60 per cent schools possessed time tables but only seven per cent followed it. The number of periods per day in 14 schools is presented in Table 4.11 which the number of periods per day in the schools of five districts varied from zero to ten. A large number of schools in all the districts followed eight periods per day.

Table 4.11: Number of Periods per Day (Schools in Percent)

| Number of Periods | BPR | RGH | RNG | SGJ | SDL |
|-------------------|-------|-------|-------|-------|-------|
| 0 | 06.70 | 02.70 | 00.00 | 25.00 | 31.10 |
| 6 | 20.00 | 02.70 | 16.70 | 15.90 | 13.30 |
| 7 | 13.30 | 05.40 | 07.10 | 22.70 | 15.60 |
| 8 | 53.30 | 81.10 | 76.20 | 36.40 | 40.00 |
| 9 | 04.40 | 08.10 | 00.00 | 00.00 | 00.00 |
| 10 | 02.20 | 00.00 | 00.00 | 00.00 | 00.00 |

The schools reporting zero period are not in possession of the time table. Probably these schools were not aware of the time table concept and its utility. Alternately, these schools may be single teacher schools in practice.

In Bilaspur only about two per cent schools observed ten periods per day. The probable reasons for such a large number of period may be looked into. Once again it appears that the department is not clear about the number of periods to be followed by a school.

The duration of the period varied from 30 to 60 minutes as revealed in Table 4.12. Majority of schools in all the districts followed a period of 40 minutes' duration.

Table 4.12: Duration of Periods (Schools in Per cent)

| Duration of Periods | BPR | RGH | RNG | SGJ | SDL |
|---------------------|-------|-------|-------|-------|-------|
| 0 | 06.70 | 02.70 | 00.00 | 25.00 | 37.50 |
| 30 minutes | 08.90 | 00.00 | 02.40 | 00.00 | 02.20 |
| 35 minutes | 26.70 | 13.50 | 23.80 | 15.90 | 08.90 |
| 40 minutes | 42.20 | 81.10 | 61.90 | 50.00 | 42.20 |
| 45 minutes | 06.70 | 02.70 | 07.10 | 06.80 | 06.70 |
| 50 minutes | 06.70 | 00.00 | 02.40 | 02.30 | 00.00 |
| 60 minutes | 02.20 | 00.00 | 02.40 | 00.00 | 02.20 |

The schools reporting zero periods supported the data of Table 4.11 the schools without time table. Only in Shahdol, the percentage of schools increased from 31.1 not having time table to 37.5 not practising the period system.

From the above discussion, it may be concluded that:

1. More than 90 per cent schools of Bilaspur, Raigarh and Rajnandgaon possessed time table but more than 85 per cent had put it to practice. Less than 75 per cent schools of Sarguja and Shahdol having with time table. Thirty per cent schools in Sarguja used time table and seven per cent schools in Shahdol practised time table
2. The number of periods in the school varied from 6 to 10 per day
3. The duration of a period ranged from 30 minutes to 60 minutes.
4. All the schools needed to have a time table. The number of periods a day should be restricted to eight only. The duration of the period may be 40 to 45 minutes.

CLASS SIZE

The average class size is presented in Table 4.13. The largest class size of 37 was available in Class I in the district Bilaspur. The smallest class size of 11 was available in Class V in the district Raigarh.

Table 4.13: Average Class Size

| Class | BPR | RGH | RNG | SGJ | SDL |
|-------|-------|-------|-------|-------|-------|
| I | 37.42 | 21.24 | 28.95 | 20.91 | 27.82 |
| II | 28.29 | 15.65 | 27.74 | 15.71 | 15.86 |
| III | 27.93 | 15.49 | 24.86 | 20.09 | 15.71 |
| IV | 32.78 | 13.00 | 23.78 | 16.23 | 16.17 |
| V | 29.91 | 10.78 | 20.33 | 10.86 | 14.20 |

The average class size declined from 37 in Class I to 30 in Class V in Bilaspur. The size of class changed from 21 in Class I to 11 in Class V in Raigarh. The average size of class varied from 29 in Class I to 20 in Class V in Rajnandgaon. The average class size changed from 21 in Class I to 11 in Class V in Sarguja. The average class size sharply declined from 28 in Class I to 14 in Class V in Shahdol. The data of enrolment can also be verified from the above Table. The enrolment has decreased from Class I to V. From the above discussion, it may be concluded that the average class size has declined from Class I to Class V in all the districts

DROPOUT RATE

The dropout rate was calculated for each district separately by using the following formula.

$$\text{Dropout Rate} = 100 - \frac{\text{Enrolment in Class V} \times 100}{\text{Enrolment in Class 1}}$$

Dropout Rate - Genderwise

Table 4.14 shows the rate of dropout of students according to gender. It is evident from Table 4.14 that dropout rate is 20 per cent in Bilaspur.

Table 4.14: Dropout Rate (Genderwise)

| District | Boys | Girls | Total |
|----------|-------|-------|-------|
| BPR | 18.88 | 21.30 | 20.07 |
| RGH | 45.06 | 52.49 | 49.23 |
| RNG | 25.26 | 33.74 | 29.77 |
| SGJ | 48.02 | 48.08 | 48.04 |
| SDL | 48.39 | 49.65 | 48.96 |

The dropout rate was 30 per cent in Rajnandgaon. For Raigarh and Shahdol the dropout rate was 49 per cent while it was 48 per cent for Sarguja. The dropout rate was higher for girls than boys in all the five districts. A greater disparity was observed in the dropout rate of boys and girls in the districts of Bilaspur, Raigarh and Rajnandgaon.

Dropout Rate - Locationwise

The locationwise dropout rate is presented in Table 4.15. The dropout rate for urban area varied from 3 in Shahdol to 45 in Raigarh. The dropout rate for rural area varied from 33 in Bilaspur to 54 in Sarguja. In all the districts, the dropout rate was higher in the rural than urban areas.

Table 4.15: Dropout Rate (Locationwise)

| District | Rural | Urban |
|----------|-------|-------|
| BPR | 32.54 | 26.10 |
| RGH | 50.50 | 44.89 |
| RNG | 35.48 | 17.02 |
| SGJ | 53.75 | 33.07 |
| SDL | 52.65 | 02.73 |

Dropout Rate - Castewise

Table 4.16 shows the dropout rate in all the districts according to caste. The dropout rate for SC varied from 28 per cent in Sarguja to 61 per cent in Raigarh. The dropout rate for ST ranged from 31 per cent in Rajnandgaon to 66 per cent in Shahdol. For SC the dropout rate was the highest in Raigarh (61 %). The dropout rate was the highest for ST in Sarguja (59%) and Shahdol (66%). For Others, the dropout rate was the highest in Bilaspur (61 %) and Rajnandgaon (76%).

Table 4.16: Dropout Rate (Castewise)

| District | SC | ST | OBC | Others |
|----------|-------|-------|-------|--------|
| BPR | 41.20 | 32.59 | 18.94 | 61.11 |
| RGH | 60.55 | 57.32 | 40.55 | 14.28 |
| RNG | 33.63 | 30.97 | 35.61 | 76.36 |
| SGJ | 27.50 | 58.62 | 48.50 | 05.71 |
| SDL | 49.54 | 66.36 | 32.99 | 10.50 |

From the above discussion, it may be concluded that:

1. The percentage of dropout students varied from a low of 20 in Bilaspur to a high of 49 in Shahdol.
2. The dropout rate for boys changed from 19 per cent in Bilaspur to 48 per cent in Sarguja and Shahdol. The dropout rate for girls varied from 21 per cent in Bilaspur to 53 per cent in Raigarh. The dropout rate of girls was higher than the dropout rate of boys.
3. The dropout rate for students in rural schools varied from 33 per cent in Bilaspur to 54 per cent in Sarguja. In the schools from the urban area, the dropout rate was the lowest (3 %) in Shahdol to 45 per cent in Raigarh. In all the districts the dropout rate was higher in schools of the rural area than schools of the urban area.
4. A clear-cut pattern is not visible in the dropout rate in all the schools of all the districts. In Bilaspur and Rajnandgaon the dropout rate was the highest for Other castes. More SC dropouts than ST dropouts were from Bilaspur, Raigarh and Rajnandgaon. Among OBC, the dropout rate was the highest in Sarguja.

WORKING DAYS

The percentage of schools according to the number of working days is shown in Table 4.17. It is evident from the Table that a large number of primary schools in all the five districts worked for 226 to 250 days during the year 1993. The percentage of such schools varied from 70.3 in Sarguja to 97.3 in Raigarh. About 10 per cent schools worked for 201 to 225 days. In Sarguja about two per cent schools worked for 151 to 175 days. Similarly in Bilaspur,

about two per cent schools worked from 176 to 200 days. There is a need to look into the working of these schools. The probable reasons for small number of working days may be the absence of teachers or the weather condition or both. Some of the schools worked for more than 250 days in Sarguja (13.7%) and Shahdol (6.6%). This shows that there is a possibility of enhancing the number of working days in all the districts. The State Government needs to explore this possibility.

Table 4.17: Percentage of Schools According to the Number of Working Days

| Working Days | BPR | RGH | RNG | SGJ | SDL |
|--------------|-------|-------|-------|-------|-------|
| 151 - 175 | 00.00 | 00.00 | 00.00 | 02.30 | 00 00 |
| 176 - 200 | 02.20 | 00.00 | 00 00 | 00.00 | 00 00 |
| 201-225 | 13 30 | 02 70 | 09 60 | 13.70 | 11.00 |
| 226-250 | 84 50 | 97.30 | 90.40 | 70.30 | 82.40 |
| Above 250 | 00.00 | 00.00 | 00.00 | 13.70 | 06.60 |

From the above discussion, it may be concluded that a large number of schools worked for 226 to 250 days. There is a possibility of enhancing number of working days above 250 of schools in all the districts.

SCHOOL BUILDINGS

The percentage of schools with own buildings is represented in Table 4.18. It is revealed from the Table that about 90 per cent schools possessed their own buildings. The percentage of schools functioning in rent-free buildings varied from 5.4 in Raigarh to 13.3 in Bilaspur. The schools with their own buildings have its advantages. Efforts are needed to provide own school buildings in all the areas.

Table 4.18: Percentage of Schools with Own Buildings

| Status | BPR | RGH | RNG | SGJ | SDL |
|--------------------|-------|-------|-------|-------|-------|
| Own Building | 86.70 | 94.60 | 90.50 | 90.90 | 88.90 |
| Rent Free Building | 13.30 | 05.40 | 09.50 | 09.10 | 11 10 |

From the above discussion, it may be concluded that about ten per cent schools do not own buildings in Bilaspur, Rajnandgaon, Sarguja and Shahdol. In Raigarh about five per cent schools are without their own buildings.

PROXIMITY TO OTHER SCHOOLS

Table 4.19 presents the proximity to educational institutions -- anganwadi/balwadi, primary school, upper primary school, high school/higher secondary school and traditional school (Madarsa)

Table 4.19: Proximity to Other Schools

| Name of the Place | Distance from the school (in Kms) | BPR | RGH | RNG | SGJ | SDL |
|--|-----------------------------------|-------|-------|-------|-------|-------|
| I Nearest Anganwadi/ Balwadi/ Pre-School | Negligible | 86 70 | 78 40 | 81 00 | 56 80 | 97 80 |
| | 1-5 | 08 80 | 18 90 | 11 90 | 38 60 | 02 20 |
| | 6 and above | 04 50 | 02 70 | 07 20 | 04 60 | 00 00 |
| II Nearest Primary School | Negligible | 15 60 | 08 10 | 11 90 | 11 40 | 04 40 |
| | 1-2 | 82 20 | 59 40 | 64 30 | 66 00 | 55 60 |
| | 3 and above | 02 20 | 32 50 | 23 80 | 22 70 | 40 00 |
| III Nearest U P School | Negligible | 31 20 | 08 10 | 16 70 | 15 90 | 06 70 |
| | 1-2 | 28 90 | 29 70 | 23 80 | 27 30 | 26 70 |
| | 3-4 | 22 20 | 32 40 | 21 40 | 11 30 | 20 00 |
| | 5 and above | 17 70 | 29 80 | 38 10 | 45 50 | 46 60 |
| IV Nearest High School/ Hr Sec School | Negligible | 17.80 | 05 40 | 07 10 | 06 80 | 04 40 |
| | 1-5 | 48 90 | 53 70 | 35 40 | 36 30 | 44 40 |
| | 6 and above | 33 30 | 40 90 | 57 50 | 56 90 | 51 20 |
| V Block Headquarter | 1-10 | 39 80 | 43 20 | 24 00 | 36 20 | 19 80 |
| | 11-20 | 26 30 | 48 70 | 31 10 | 29 50 | 35 40 |
| | 21 and above | 33 90 | 08 10 | 44 90 | 34 30 | 44 80 |
| VI Nearest Traditional School (Madrasa etc) | Negligible | 93 30 | 83 80 | 95 20 | 86 40 | 95 60 |
| | 1-5 | 02.20 | 08 10 | 02 40 | 09 10 | 04 40 |
| | 6-10 | 02 20 | 05 40 | 02 40 | 02 30 | 00 00 |
| | 10 and above | 02 30 | 02 70 | 00 00 | 02 30 | 00 00 |

The preschool facility was available at the negligible distance from the sample school in Shahdol district. In Sarguja the facility was available to less than sixty per cent schools.

The nearest primary school was available in more than 55 per cent locations in the districts of Raigarh, Rajnandgaon, Sarguja and Shahdol within two kilometres. In Bilaspur more than 80 per cent primary schools were located within two kilometres from the sampled school

Table 4.19 depicted that the facility of upper primary school is not within the reach from the sampled school in more than 50 per cent cases in all the districts except Bilaspur. In Bilaspur upper primary school existed within two kilometres from the sampled school in 58 per cent cases. The Table indicated the availability of high school or higher secondary schools also.

From the above discussion, it may be concluded that upper primary schools were not within the reach on foot for more than 50 per cent students population as these were located away from the sampled school.

CLASSROOMS

Table 4.20 presents the percentage of schools according to the number of classrooms. There was no classroom in two per cent schools in the districts of Raigarh, Rajnandgaon and Shahdol. Nine per cent schools were without classrooms in Sarguja. It may be pointed out here that about 2.3 per cent schools worked for less than 175 days in the district. There was a possibility that the weather condition did not allow these schools without classroom to work

Table 4.20: Percentage of Schools According to Number of Classrooms

| No of Classrooms | BPR | RGH | RNG | SGJ | SDL |
|------------------|-------|-------|-------|-------|-------|
| Zero | 00.00 | 02.70 | 02.40 | 09.10 | 02.20 |
| One | 04.40 | 02.70 | 04.80 | 09.10 | 13.30 |
| Two | 33.30 | 18.90 | 19.00 | 27.30 | 24.40 |
| Three | 24.40 | 35.10 | 40.50 | 27.30 | 24.40 |
| Four | 11.10 | 21.60 | 23.80 | 20.50 | 26.70 |
| Five | 11.10 | 13.50 | 04.80 | 04.50 | 04.40 |
| More than Five | 15.50 | 05.40 | 04.80 | 02.30 | 04.40 |

More than 50 per cent schools possessed two and three classrooms in all the districts.

The percentage of schools having four rooms varied from 11.1 in Bilaspur to 26.7 in Shahdol. The percentage of schools with five rooms ranged from 4.4 in Shahdol to 13.5 in Raigarh

The percentage of schools with one room varied from 2.7 in Raigarh to 13.3 in Shahdol. It is important to note here that all the five classes (from Class I to V) were to be accommodated in one room is not congenial to weather. The teaching-learning process was getting affected for want of space in these schools.

The percentage of schools requiring classrooms are presented in Table 4.21. The percentage of schools who did not need a classroom varied from 9.5 in Rajnandgaon to 28.9 in Shahdol. The percentage of schools who wanted one room ranged from 6.7 in Bilaspur to 15.9 in Sarguja

About 45 per cent schools in Raigarh and Shahdol required two to three classrooms. In the districts of Bilaspur and Sarguja about 55 per cent schools needed two to three classrooms. In Rajnandgaon 71 per cent schools required two to three classrooms.

Table 4.21: Percentage of Schools Requiring Additional Classrooms

| No of Classrooms | BPR | RGH | RNG | SGJ | SDL |
|------------------|-------|-------|-------|-------|-------|
| Zero | 11.10 | 27.00 | 09.50 | 18.20 | 28.90 |
| One | 06.70 | 10.80 | 00.00 | 15.90 | 11.90 |
| Two | 33.30 | 29.70 | 38.10 | 36.40 | 17.80 |
| Three | 22.20 | 18.90 | 33.30 | 18.20 | 26.70 |
| Four | 11.10 | 08.10 | 04.80 | 04.50 | 08.90 |
| Five | 13.30 | 05.40 | 09.50 | 06.80 | 04.40 |
| More than Five | 02.20 | 00.00 | 04.80 | 00.00 | 02.20 |

The percentage of schools requiring four to five classrooms varied from 11.3 in Sarguja to 24.4 in Bilaspur.

There were schools in Bilaspur (2.2%), Rajnandgaon (4.8%) and Shahdol (2.2%) who needed even more than five classrooms.

From the above discussion, it may be concluded that schools in each district needed classrooms. The number of classrooms required by a school varied from 1 to 5. Each school has its own requirement.

ESSENTIAL FACILITIES

The schools were asked about the availability of essential facilities. It is revealed from Table 4.22 that a large number of schools in Bilaspur (49%), Raigarh (65%) and Shahdol (71%) were without drinking water facility

Table 4.22: Percentage of Schools Having Essential Facilities

| Facilities | BPR | RGH | RNG | SGJ | SDL |
|--------------------------------------|-------|-------|-------|-------|-------|
| Safe Drinking Water | 51.10 | 35.10 | 47.60 | 47.70 | 28.90 |
| Toilet Facilities | 02.20 | 08.10 | 11.90 | 02.30 | 06.70 |
| Separate Toilet Facilities for Girls | 02.20 | 00.00 | 04.80 | 02.30 | 06.70 |
| Electric Connection for the Schools | 15.60 | 02.70 | 11.90 | 06.80 | 02.20 |

The toilet facility was available in schools to girls only in Bilaspur (2.2%), Sarguja (2.3%) and Shahdol (6.7%). In Rajnandgaon toilet facility for girls was available in 4.8 per cent schools. The toilet facility was not available for girls in the schools in the district Raigarh. The toilet facility was almost non-existent for boys in Bilaspur, Sarguja and Shahdol.

It is surprising to note that electric connection was not available in schools. The percentage of schools having electric connection varied from 2.2 in Shahdol to 15.6 in Bilaspur.

The basic facility of drinking water, toilet and electric connection was not available in the schools in all the five districts.

The percentage of schools having furniture for teacher is indicated in Table 4.23. The table and chair for teachers were not available in Bilaspur (22%) and Shahdol (31%). In the other two districts of Raigarh and Rajnandgaon the chairs were available to more than 91 per cent teachers.

Table 4.23: Percentage of Schools with Furniture and Equipment

| Facilities | BPR | RGH | RNG | SGJ | SDL |
|-------------------------------|-------|-------|-------|-------|-------|
| Chair for Teacher | 77.80 | 91.90 | 90.50 | 93.20 | 68.90 |
| Tables for Teacher | 77.80 | 94.60 | 90.50 | 79.50 | 68.90 |
| Water Pitcher and Ladle Glass | 53.30 | 59.50 | 76.20 | 54.50 | 46.70 |
| Dustbin | 44.40 | 54.10 | 81.00 | 54.50 | 35.60 |
| School Bell | 80.00 | 83.80 | 95.20 | 75.00 | 53.30 |
| Pin-Up Board/ Notice Board | 24.40 | 05.40 | 28.60 | 11.40 | 11.10 |

In Sarguja chairs were available to 93.2 per cent teachers while tables were available to 79.5 per cent teachers. This shows that about ten per cent teachers from Raigarh, Rajnandgaon and Sarguja needed chairs. The percentage of teachers who required chairs and tables was 22 in Bilaspur, and 31 in Shahdol. About 30 per cent teachers from Sarguja needed tables.

In Bilaspur and Sarguja water pitchers were available in 54 per cent schools. This indicated that 46 per cent schools of these districts required water pitchers. Twenty-four per cent schools from Rajnandgaon needed water pitchers. The schools from Raigarh and Shahdol needed water pitchers for 40 and 53 per cent schools, respectively.

The school bell is an essential item. In the absence of the bell the timings of the school could not be maintained. For many students, the school bell served the purpose of a call. Surprisingly, the study revealed that many schools in the five districts were without school bell. The school bell was not available in about 20 per cent of schools in Bilaspur and Raigarh.

The availability of facilities for play and game in terms of percentage of schools is reported in Table 4.24. The percentage of schools with play material and toys varied from 48.9 per cent in Shahdol to 88.1 per cent in Rajnandgaon. The percentage of schools having game equipment ranged from 37.8 in Shahdol to 83.3 in Rajnandgaon. The percentage of schools with availability of musical instruments varied from 37.8 in Raigarh to 78.6 in Rajnandgaon.

Table 4.24: Availability of Facilities for Play and Games

| Facilities | BPR | RGH | RNG | SGJ | SDL |
|------------------------|-------|-------|-------|-------|-------|
| Play Material Toys | 62.20 | 64.90 | 88.10 | 70.50 | 48.90 |
| Game Equipments | 48.90 | 51.40 | 83.30 | 65.90 | 37.80 |
| Musical Instruments | 42.20 | 37.80 | 78.60 | 47.70 | 44.40 |

As reported in the Field Notes, many of these schools were covered under OB Scheme. The non-availability of musical instruments in these schools is a matter of surprise. Special efforts are required to equip all the schools with game equipment, play material and toys and musical instruments.

Table 4.25 reveals the position of playground. More than 80 per cent sampled schools possessed the facility of playground in Bilaspur, Sarguja and Shahdol. In Rajnandgaon schools with the availability of playground were 56 per cent. About 77 per cent schools of Raigarh were with the playground facility.

Table 4.25: Percentage of Schools Having Playgrounds

| Description | BPR | RGH | RNG | SGJ | SDL |
|--|-------|-------|-------|-------|-------|
| Playground Facilities (away from School Premises) | 20 | 21.60 | 16.70 | 27.30 | 22.20 |
| Playground within the School Premises | 66.70 | 56.80 | 40.50 | 59.10 | 60.00 |

The playground is an essential feature of the school required for all the children to play.

From the above discussion, it may be concluded that:

1. About 50 per cent schools required facility for safe drinking water in Bilaspur, Rajnandgaon and Sarguja. More than 65 per cent schools of Raigarh and Shahdol also needed the same facility.
2. Almost all the schools required separate toilet facility for boys and girls in all the districts.
3. Electricity connections are to be provided in all the schools.
4. More than 90 per cent schools have tables and chairs for teachers in the districts of Raigarh, Rajnandgaon and Sarguja. More than ten per cent schools of Bilaspur and Shahdol needed tables and chairs for teachers.
5. The school bell and pin-up board/notice board should be made available to all the schools.
6. Efforts should be made for providing playgrounds to all the schools.

HEALTH FACILITIES

The percentage of schools having health facility is shown in Table 4.26. About 90 per cent of schools from Bilaspur and Rajnandgaon were covered under the Annual Medical Check-up of students. The facility of Annual Medical Check-up of students was available to 60 per cent schools of Raigarh, 77 per cent schools of Sarguja and 76 per cent of schools of Shahdol.

Table 4.26: Availability of Health Facilities in Schools (in Per cent)

| Facilities | BPR | RGH | RNG | SGJ | SDL |
|------------------------|-------|-------|-------|-------|-------|
| Annual Medical Checkup | 93.30 | 59.50 | 90.50 | 77.30 | 75.60 |
| Immunization Facility | 53.30 | 40.50 | 64.30 | 45.50 | 15.60 |
| First Aid Kit | 15.60 | 05.40 | 19.00 | 09.10 | 11.10 |

Immunization facility was available to 16 per cent schools of Shahdol. The facility exists for Bilaspur (53%), Raigarh (41%), Rajnandgaon (64%) and Sarguja (46%). The first aid kit was available in 16 per cent schools of Bilaspur and 19 per cent schools of Rajnandgaon. This facility was also available in Raigarh (5%), Sarguja (9%) and Shahdol (11%).

From the above discussion, it may be concluded that:

1. The facility for annual medical check-up should be extended to all the schools. The facility is in existence in all the districts but the coverage is inadequate in Raigarh, Sarguja and Shahdol
2. The facility of immunization needs to be made available to the students of all the schools
3. The availability of first aid kits should be ensured for all the schools

TEACHER-PUPIL RATIO

The teacher-pupil ratio of all the five districts is presented in Table 4.27. The study found that there is a wide variation in teacher-pupil ratio according to the strength. The apparent and effective teacher-pupil ratio is different. The apparent teacher-pupil ratio varied from 28 in Raigarh to 54 in Bilaspur. Many posts of teachers are sanctioned in the schools but the incumbents are not posted. The apparent teacher-pupil ratio is lower than the effective teacher-pupil ratio as calculated on the basis of the teachers available in the school. The effective teacher-pupil ratio varied from 29 in Raigarh to 56 in Bilaspur. The teacher-pupil ratio is higher (more than 40) in Bilaspur and Rajnandgaon.

Table 4.27: Teacher-Pupil Ratio

| | BPR | RGH | RNG | SGJ | SDL |
|---|-------|-------|-------|-------|-------|
| Apparent Teacher Pupil Ratio (APR) | 54.12 | 28.08 | 30.09 | 31.51 | 34.83 |
| Effective Teacher Pupil Ratio (EPR) | 56.28 | 29.25 | 43.62 | 37.62 | 40.40 |

POSITION OF TEACHERS

The data was also collected about the availability of teachers in schools. The average number of teachers on roll per school is given in Table 4.28 according to gender. The data clearly revealed that in proportion to one female teacher, three to five male teachers were available in all the districts. The average number of female teachers is almost the same in all the districts except Rajnandgaon.

The percentage of schools with vacant posts of teachers is shown in Table 4.29. The percentage of schools where no post is vacant varied from 43 in Sarguja to 81 in Raigarh. This shows that posts of teachers are vacant in 56 per cent schools of Bilaspur. The percentage of schools having more than 3 vacant posts is the highest (31.2) in district Bilaspur.

Table 4.28: Average Number of Teachers on Roll

| | | BPR | RGH | RNG | SGJ | SDL |
|---------|--------|-------|-------|-------|-------|-------|
| 1991-92 | Male | 02.60 | 02.50 | 02.10 | 02.20 | 01.80 |
| | Female | 00.50 | 00.40 | 00.80 | 00.50 | 00.50 |
| | Total | 03.10 | 02.90 | 02.90 | 02.70 | 02.30 |
| 1992-93 | Male | 02.40 | 02.10 | 02.10 | 02.00 | 01.70 |
| | Female | 00.50 | 00.40 | 00.70 | 02.40 | 00.50 |
| | Total | 02.90 | 02.50 | 02.80 | 02.40 | 02.20 |
| 1993-94 | Male | 02.50 | 02.00 | 01.70 | 01.80 | 01.70 |
| | Female | 00.40 | 00.40 | 00.80 | 00.40 | 00.50 |
| | Total | 02.90 | 02.40 | 02.50 | 02.20 | 02.20 |

Table 4.29: Percentage of Schools with Vacant Post of Teachers

| Vaccant Post | BPR | RGH | RNG | SGJ | SDL |
|--------------|-------|-------|-------|-------|-------|
| 0 | 44.40 | 81.10 | 73.80 | 43.20 | 60.00 |
| 1 | 15.60 | 10.80 | 23.80 | 40.90 | 35.60 |
| 2 | 04.40 | 08.10 | 02.40 | 02.30 | 02.20 |
| 3 | 04.40 | 00.00 | 00.00 | 04.50 | 02.20 |
| Above 3 | 31.20 | 00.00 | 00.00 | 09.10 | 00.00 |

In Raigarh, the percentage of schools having one and two vacancies of teachers was 10.8 and 8.1, respectively. The position in this district is slightly better in comparison to all the four districts.

In Rajnandgaon 23.8 per cent of schools required one teacher and 2.4 per cent schools needed 2 teachers. The percentage of schools of district Sarguja requiring one teacher was 40.9. About 9 per cent schools required more than 3 teachers in this district. The percentage of schools requiring one teacher was 35.6 in Shahdol. The percentage of schools needed 2 and 3 teachers was 2.2 each in district Shahdol

It is evident from Table 4.29 that a large number of schools were having one vacancy of teacher, the percentage varied from 10.8 in Raigarh to 40.9 in Sarguja.

The schools were asked to supply the information about the need of additional teachers according to the strength of students. The felt need of the schools was tabulated. The percentage of schools who required the services of an additional teachers.

Table 4.30: Additional Teachers Required by Schools

| Vaccant Post | BPR | RGH | RNG | SGJ | SDL |
|--------------|-------|-------|-------|-------|-------|
| 0 | 44.40 | 86.50 | 54.80 | 54.50 | 64.40 |
| 1 | 37.80 | 10.80 | 35.70 | 43.20 | 24.40 |
| 2 | 13.30 | 02.70 | 07.10 | 02.30 | 11.10 |
| 3 | 04.50 | 00.00 | 00.00 | 00.00 | 00.00 |
| Above 3 | 00.00 | 00.00 | 02.40 | 00.00 | 00.00 |

The percentage of schools where no teacher is required varied from 44.4 in Bilaspur to 86.5 in Raigarh.

Most of the schools felt the need of one teacher according to the strength of the students in the school. The percentage of schools requiring one teacher varied from 10.8 in Raigarh to 43.2 in Sarguja. The percentage of schools in Bilaspur requiring one teacher was 37.8

The percentage of schools needing two teachers varied from 2.3 in Sarguja to 13.3 in Bilaspur. In Bilaspur, 4.5 per cent schools required three additional teachers. In Rajnandgaon, 2.4 per cent schools needed more than three teachers. From the above Table it may be conclude that the schools required teachers but the demand of teacher varied from district to district.

From the above discussion it may be concluded that:

1. The average number of teachers per school varied from 2.2 to 2.9 during the year 1994-95. More male teachers than female teachers were employed.
2. More than 50 per cent posts of teachers were vacant in Bilaspur and Sarguja. 20 to 40 per cent posts of teachers were vacant in Raigarh, Rajnandgaon and Shahdol. Immediate efforts are needed to fill up these posts
3. At many places additional teachers were required. The department needs to create the posts of teachers at these places.

While creating the posts of teachers due weightage should be given to number of classes and number of sections. The old practice of number of students on roll for creating posts of teachers should be discarded

COMMUNITY CONTRIBUTION TO SCHOOLS

The schools were asked to indicate the contribution of community in the functioning of schools. The community included parent teacher associations, voluntary agencies, supporting organisations, teachers associations, students organisations, etc. The contribution to the school by these organisations might be in the form of cash or kind for the purchase or supply or maintenance of school equipment. The contribution of the community to the schools was tabulated and presented in Table 4.31. The percentage of schools reporting no community contribution in terms of financial assistance varied from 78.4 in Raigarh to 100 per cent in Sarguja. This shows that the community contributed no funds to schools in Sarguja. About 2.2 per cent schools got community contribution in terms of funds from Rs. 1 - 500. In Bilaspur, 8.8 per cent schools got community support in this category. In Raigarh and Rajnandgaon the community support was extended to 10.8 and 14.4 per cent schools respectively.

Table 4.31: Community Contribution to Schools

| Contribution | BPR | RGH | RNG | SGJ | SDL |
|-----------------|-------|-------|-------|-------|-------|
| No Contribution | 82.20 | 78.40 | 78.60 | 100.0 | 97.80 |
| Rs. 1-500 | 08.80 | 10.80 | 14.40 | 00.00 | 02.20 |
| Rs. 501-1000 | 02.20 | 05.40 | 02.40 | 00.00 | 00.00 |
| Rs. 1001-1500 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| Rs. 1501-2000 | 02.20 | 02.70 | 00.00 | 00.00 | 00.00 |
| Above Rs.2000 | 04.40 | 02.70 | 04.80 | 00.00 | 00.00 |

The community support in terms of funds from Rs.500-1000 was extended to 2.2 per cent in Bilaspur schools, 5.4 per cent in Raigarh schools and 2.4 per cent in Rajnandgaon schools.

The percentage of schools who got financial assistance from the community to the magnitude of Rs.1501-2000 was 2.2 per cent in Bilaspur and 2.7 per cent in Raigarh. There were schools in the district of Bilaspur (4.4%), Raigarh (2.7%) and Rajnandgaon (4.8%) who got the community support of more than Rs.2000.

CHAPTER 5

THE TEACHER

The present chapter deals with the characteristics of teachers in the five districts. The analysis and interpretation of data about teachers relating to age, academic and professional education, inservice education, teaching aids, multigrade teaching, use of textbooks, homework, teachers' expectation, supervision, head teachers, etc. is presented here.

The expected sample for teachers from 214 schools was 1070 as five teachers were expected to be included from each school. The schools included in the study had five classes but not five teachers.

In all the five districts 498 teachers were interviewed for the study which is 46.5 per cent of the expected sample. The teachers from rural and urban areas were 372 and 113, respectively. The percentage of teachers from different districts were 25.90 in Bilaspur, 17.87 in Raigarh, 29.29 in Rajnandgaon, 17.67 in Sarguja and 17.26 in Shahdol.

DISTRIBUTION OF TEACHERS

The percentage of distribution of sampled teachers is presented in Table 5.1. The Table reveals that except Rajnandgaon where the percentage was 70, the female teachers in the primary schools of all the five districts ranged from 13.2 per cent in Bilaspur to 30.2 per cent in Rajnandgaon.

Table 5.1: Percentage Distribution of Sample Teachers

| District | Gender | | Location | | Caste | | | |
|----------|--------|--------|----------|-------|-------|-------|-------|--------|
| | Male | Female | Rural | Urban | SC | ST | OBC | Others |
| BPR | 86.80 | 13.20 | 78.30 | 21.70 | 14.00 | 13.20 | 37.20 | 35.70 |
| RGH | 83.10 | 16.90 | 84.30 | 15.70 | 06.70 | 38.20 | 41.60 | 13.50 |
| RNG | 69.80 | 30.20 | 85.30 | 14.70 | 14.20 | 17.90 | 46.20 | 21.70 |
| SGJ | 80.70 | 19.30 | 69.30 | 30.70 | 06.80 | 50.00 | 10.20 | 33.00 |
| SDL | 75.60 | 24.40 | 74.40 | 25.60 | 02.40 | 31.00 | 19.00 | 47.60 |

A large number of teachers (about 80%) were from rural areas. The percentage of teachers belonging to SC/ST were below the percentage of population proportion as per 1991 Census. Only in district Sarguja 50 per cent teachers were ST. In Bilaspur and Rajnandgaon, the percentage of ST teachers were 13.2 and 17.9, respectively.

The percentage of SC teachers ranged from 2.4 in Shahdol to 14.2 in Rajnandgaon. This shows that SC teachers were the lowest in the sampled population. The percentage of OBC teachers varied from 10.2 in Sarguja to 46.2 in Rajnandgaon. The percentage of Other teachers ranged from 13.5 in Raigarh to 47.6 in Shahdol.

The following conclusions may be drawn from the above discussion:

1. The representation of female teachers in the profession is very low (13 to 30%). Male teachers (more than 80%) were available in Bilaspur, Raigarh and Sarguja. About 70 per cent male teachers were there in Rajnandgaon and Shahdol.
2. The female teachers were about 20 per cent.
3. A large number of teachers were from rural areas.
4. The representation of OBC teachers were high (about 40%) in Bilaspur, Raigarh and Rajnandgaon. Fifty per cent teachers were ST in Sarguja.

AGE OF TEACHERS

The distribution of teachers according to age and gender is given in Table 5.2. More than 60 per cent teachers were in the range of 35 years and above. Very small percentage (less than 10%) were in the range below 25 years. The percentage of teachers in the range 25-29 years varied from 5.4 in Bilaspur to 17.4 in Shahdol.

The percentage of female teachers is low in comparison to the male teachers in all the districts except in the range of 25 to 34 years. This shows that more female teachers entered in the service of primary schools at the older age.

The percentage of male teachers in the age-group of 45 and above varied from 28.4 in Raigarh to 51.8 in Bilaspur. The percentage of female teachers in this age-group ranged from 11.8 in Bilaspur to 46.7 in Raigarh.

There were no male teachers in the age range of below 25 years in Bilaspur and Rajnandgaon. Similarly no female teachers were available in the districts of Sarguja and Shahdol in the age of below 25 years. This shows that female teachers have not been recruited in these districts during the last few years.

Table 5.2: Percentage Distribution of Teachers According to Age (Genderwise)

| District | Age Group (in Years) | Number of Teachers | | |
|----------|-------------------------|--------------------|-------|-------|
| | | Male | Femal | Total |
| BPR | Below 25 | 00 00 | 17 60 | 02 30 |
| | 25-29 | 05.40 | 05 90 | 05 40 |
| | 30-34 | 23 20 | 47 10 | 26 40 |
| | 35-44 | 19 60 | 17 60 | 19 40 |
| | 45 and above | 51.80 | 11 80 | 46 50 |
| RGH | Below 25 | 02 70 | 06 70 | 03 40 |
| | 25-29 | 13 50 | 00 00 | 11 20 |
| | 30-34 | 28.40 | 20 00 | 27 00 |
| | 35-44 | 27 00 | 26.70 | 27 00 |
| | 45 and above | 28 40 | 46 70 | 31 50 |
| RNG | Below 25 | 00.00 | 06.30 | 01 90 |
| | 25-29 | 09.50 | 15 60 | 11 30 |
| | 30-34 | 27.00 | 21.90 | 25 50 |
| | 35-44 | 17 60 | 34 40 | 22 60 |
| | 45 and above | 45 90 | 21 90 | 38 70 |
| SGJ | Below 25 | 05 60 | 00.00 | 04 50 |
| | 25-29 | 14.10 | 17.60 | 14.80 |
| | 30-34 | 24.40 | 35 30 | 27.30 |
| | 35-44 | 23.90 | 29 40 | 25 00 |
| | 45 and above | 31 00 | 17 60 | 28 40 |
| SDL | Below 25 | 06 20 | 00.00 | 04 70 |
| | 25-29 | 13.80 | 28 60 | 17 40 |
| | 30-34 | 20 00 | 09 50 | 17 40 |
| | 35-44 | 29 20 | 33.30 | 30 20 |
| | 45 and above | 30 80 | 28 60 | 30 20 |

ACADEMIC QUALIFICATIONS

Table 5.3 shows percentage distribution of teachers according to the educational level. About 37 per cent teachers in Bilaspur were matriculates and below. On an average 15 per cent teachers passed Class VIII only in all the districts except in Shahdol and Raigarh. In these two districts about 3 per cent teachers have passed Class VIII. The percentage of having higher secondary certificate varied from 24.8 in Bilaspur to 48.3 in Raigarh.

Table 5.3: Percentage Distribution of Teachers According to Educational Level (Genderwise)

| District | Qualification | Male | Female | Total |
|----------|-----------------|-------|--------|-------|
| BPR | Class VIII | 18.80 | 11.80 | 17.80 |
| | Matriculation | 19.60 | 18.60 | 19.40 |
| | Hr. Secondary | 25.00 | 23.50 | 24.80 |
| | Graduation | 17.00 | 17.60 | 17.10 |
| | Post-graduation | 19.60 | 29.40 | 20.90 |
| RGH | Class VIII | 01.40 | 13.30 | 03.40 |
| | Matriculation | 12.20 | 40.00 | 16.90 |
| | Hr. Secondary | 51.40 | 33.30 | 48.30 |
| | Graduation | 16.20 | 13.30 | 15.70 |
| | Post-graduation | 18.90 | 00.00 | 15.70 |
| RNG | Class VIII | 16.20 | 09.40 | 14.20 |
| | Matriculation | 13.50 | 12.50 | 13.20 |
| | Hr. Secondary | 45.90 | 40.60 | 44.30 |
| | Graduation | 14.90 | 21.90 | 17.00 |
| | Post-graduation | 09.50 | 15.60 | 11.30 |
| SGJ | Class VIII | 18.30 | 05.90 | 15.90 |
| | Matriculation | 15.50 | 11.80 | 14.80 |
| | Hr. Secondary | 33.80 | 23.50 | 31.80 |
| | Graduation | 16.90 | 47.10 | 22.70 |
| | Post-graduation | 15.50 | 11.80 | 14.80 |
| SDL | Class VIII | 03.10 | 00.00 | 02.30 |
| | Matriculation | 10.80 | 23.80 | 14.00 |
| | Hr. Secondary | 35.40 | 28.60 | 33.70 |
| | Graduation | 21.50 | 33.30 | 24.40 |
| | Post-graduation | 29.20 | 14.30 | 25.60 |

In Shahdol 50 per cent teachers were graduates and above. In Rajnandgaon about 28 per cent teachers were graduates and above. In other three districts -Bilaspur, Raigarh and Sarguja about 30 per cent teachers were graduates and post-graduates. A clear picture emerges from the Table that more female teachers were graduate than male teachers. This is particularly important when the percentage of female teachers is low in comparison to the male teachers in all the districts.

From the above discussion, it may be concluded that more male teachers were eighth passed in comparison to female teachers. More female teachers possessed qualification of graduation and above in comparison to male teachers in all the districts except Raigarh. In Raigarh more male teachers were in this category than female teachers.

PROFESSIONAL QUALIFICATION

A glance at Table 5.4 indicates that in the entire population there was not even a single teacher having qualification of Master's Degree in Education and above. Among male teachers about 70 per cent were trained at elementary teacher education level in Bilaspur and Rajnandgaon. More than 50 per cent male teachers got elementary teacher education certificate/diploma course in the three districts -Raigarh, Sarguja and Shahdol. Eighty per cent female teachers possessed elementary teacher education certificate/diploma in Raigarh. In all other four districts the average was 50 per cent. A very small percentage was trained graduates in four districts. The percentage of trained graduate teachers were distributed almost equally in rural and urban areas.

The data about teachers without professional training was also collected to know the position of trained teachers. More than one-third teachers were untrained in Raigarh, Rajnandgaon, Sarguja and Shahdol. In Bilaspur more than 25 per cent teachers were untrained.

It is surprising to note that a large number of teachers were untrained. The percentage varied from 27.1 in Bilaspur to 43.8 in Raigarh as shown in Table 5.5.

There is a need to look into the policy of recruitment in these districts. Trained teachers are available in the region. Then who are these teachers and how these are recruited? It is a matter of serious concern. Is the liberal recruitment policy of the State Government responsible for the recruitment?

Table 5.4: Percentage Distribution of Teachers According to Professional Training

| District | Teachers Training | Genderwise | | | Locationwise | |
|----------|--|------------|-------|-------|--------------|-------|
| | | Male | Femal | Total | Rural | Urban |
| BPR | Primary/Elementary Teacher Certificate/Diploma | 70.50 | 41.20 | 55.70 | 72.30 | 46.40 |
| | Graduate Trained (B.Ed. or Equivalent) | 06.30 | 00.00 | 05.40 | 05.00 | 07.10 |
| | M.Ed. & above | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| RGH | Primary/Elementary Teacher Certificate/Diploma | 50.00 | 80.00 | 55.10 | 48.00 | 92.90 |
| | Graduate Trained (B.Ed. or Equivalent) | 01.40 | 00.00 | 01.10 | 01.30 | 00.00 |
| | M.Ed. & above | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| RNG | Primary/Elementary Teacher Certificate/Diploma | 70.30 | 50.00 | 64.20 | 66.30 | 57.70 |
| | Graduate Trained (B.Ed. or Equivalent) | 04.10 | 00.00 | 02.80 | 02.50 | 03.80 |
| | M.Ed. & above | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| SGJ | Primary/Elementary Teacher Certificate/Diploma | 56.30 | 58.80 | 56.80 | 55.70 | 59.30 |
| | Graduate Trained (B.Ed. or Equivalent) | 02.80 | 05.90 | 03.40 | 03.30 | 03.70 |
| | M.Ed. & above | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| SDL | Primary/Elementary Teacher Certificate/Diploma | 55.40 | 57.10 | 55.80 | 56.30 | 54.50 |
| | Graduate Trained (B.Ed. or Equivalent) | 07.70 | 04.80 | 07.00 | 06.30 | 09.10 |
| | M.Ed. & above | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |

Table 5.5: Percentage of Untrained Teachers

| District | Percentage |
|----------|------------|
| BPR | 27.10 |
| RGH | 43.80 |
| RNG | 31.10 |
| SGJ | 36.10 |
| SDL | 33.70 |

From the above discussion, it may be concluded that

- 1 A large number of teachers are untrained in all the districts. The DIETs of these districts should be empowered to design training programmes for these teachers.
- 2 Teachers with B.Ed. need to be given additional inservice training to conduct action research to solve the problems of the schools. Once these teachers were identified and trained they should not be disturbed from their position

INSERVICE EDUCATION

The percentage of teachers who have not undergone inservice training is presented in Table 5.6. More than 40 per cent teachers did not attend inservice teacher education programme from the districts of Bilaspur, Raigarh, Sarguja and Shahdol. From Rajnandgaon 23.6 per cent teachers did not participate in the inservice education programme. From Raigarh and Sarguja about 46 per cent teachers from rural areas did not participate in inservice education programme. About 50 per cent teachers from the urban areas of Bilaspur and Shahdol did not participate in the inservice education programme.

Table 5.6: Percentage of Teachers Who have Not Undergone Inservice Training

| District | Percentage of Teachers | | | | |
|----------|------------------------|-------|------------|--------|-------|
| | Locationwise | | Genderwise | | |
| | Rural | Urban | Male | Female | Total |
| BPR | 44.60 | 50.00 | 42.00 | 70.60 | 45.70 |
| RGH | 46.70 | 21.40 | 43.20 | 40.00 | 42.70 |
| RNG | 23.80 | 23.10 | 17.60 | 37.50 | 23.60 |
| SGJ | 47.50 | 33.30 | 43.70 | 41.20 | 43.20 |
| SDL | 35.90 | 54.50 | 35.40 | 57.10 | 40.70 |

The percentage of female teachers who did not undergo inservice education programme varied from 37.5 in Rajnandgaon to 70.6 in Bilaspur. This shows that more female teachers did not participate in the inservice education programme from Bilaspur, Rajnandgaon and Shahdol

Non-participation of a teacher in the inservice education programme is an alarming situation. After the National Policy on Education (1986), the NCERT in collaboration with the State Government of Madhya Pradesh organised a Programme for Massive Orientation of School Teachers under the centrally sponsored scheme. The agewise distribution of teachers indicated that many of these teachers were in the service (Table 5.2). These teachers did not participate in the inservice education programme for a number of reasons. The State Government needs to take necessary steps for the inservice education of these teachers.

Teachers were asked to suggest whether they will like to participate in inservice education programme. The percentage of teachers who desired for participation in inservice education programme varied from 52.7 in Bilaspur to 70.5 in Sarguja. This shows that teachers were willing to participate in the inservice education programme (Table 5.7)

Table 5.7: Percentage of Teachers Desiring Inservice Training

| District | Percentage |
|----------|------------|
| BPR | 52.70 |
| RGH | 67.40 |
| RNG | 56.60 |
| SGJ | 70.50 |
| SDL | 68.90 |

About 60 per cent teachers of five districts desired to participate in inservice training. This desire of teachers should be fulfilled. The State Government needs to create infrastructure of inservice education for these teachers. It is important to note here that the District Institutes of Education and Training have been established in all the five districts under the centrally sponsored scheme of qualitative improvement of teacher education. The inservice education wing of these DIETs need to be strengthened. They may be assigned the task to organise inservice education programme for primary school teachers in their respective districts.

The teachers were asked to suggest the content of training programme. The responses are given in Table 5.8. The maximum percentage of teachers from all the five districts desired training in the National Policy on Education. This shows that teachers are interested in knowing the latest policy matters related to education. The second choice of area is multigrade teaching. The percentage of teachers willing to undergo inservice training in multigrade teaching varied from 19.1 in Bilaspur to 40 in Rajnandgaon. The area has direct bearings on the day-to-day teaching in primary schools. Special efforts are required to fulfil the desire of teachers in the above two areas, viz. Education Policy and Multigrade Teaching.

Table 5.8: Content of Training

| Training Required | BPR | | RGH | | RIG | | SGJ | | SDL | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | Option 1 | Option 2 | Option 1 | Option 2 | Option 1 | Option 2 | Option 1 | Option 2 | Option 1 | Option 2 |
| | Option 1 | Option 2 | Option 1 | Option 2 | Option 1 | Option 2 | Option 1 | Option 2 | Option 1 | Option 2 |
| Subject Matter | 05.90 | 05.90 | 08.30 | 05 00 | 01.70 | 01 70 | 16.10 | 03.20 | 07.70 | 01.90 |
| Presenting and Communicating Subject Matter | 10 30 | 01 50 | 03.30 | 05.00 | 05.00 | 06.70 | 11.30 | 04.80 | 07 70 | 01 90 |
| Multigrade Teaching | 19 10 | 04.40 | 20.00 | 16 70 | 40 00 | 13.30 | 21.00 | 11.30 | 28 80 | 05 80 |
| Teaching Skills for Lower Primary Classes | 11.80 | 02.90 | 15.00 | 06.70 | 10 00 | 13 30 | 16.10 | 12.90 | 11.50 | 17 30 |
| National Policy on Education | 39.70 | 38.30 | 30.00 | 31.70 | 25.00 | 35.00 | 27.40 | 45.20 | 25.00 | 32.70 |
| Use of Teaching Aids | 05.90 | 39.70 | 11.70 | 25 00 | 15.00 | 18 30 | 01.60 | 19 40 | 09.60 | 32 70 |
| Others | 07.40 | 05.90 | 11.70 | 10.00 | 03.30 | 11.70 | 06.40 | 03.20 | 09.60 | 07 70 |
| Total | 100.00 | 98.50 | 99.00 | 100.00 | 100.00 | 100.00 | 100 00 | 100.00 | 100.00 | 100 00 |

The percentage of teachers willing to undergo inservice training in presenting and communicating the subject-matter varied from 3.3 in Raigarh to 11.3 in Sarguja. The percentage of teachers who desired training in teaching skills for lower primary classes varied from 10 in Rajnandgaon to 16.1 in Sarguja. The training in use of teaching aids was also desired by teachers. The range is 1.6 in Sarguja to 11.7 in Rajnandgaon. The training in subject-matter was also preferred by many teachers. The percentage varied from 1.7 in Rajnandgaon to 16.1 in Sarguja.

The careful appraisal of Table 5.8 reveals that though the need of inservice training of teachers is clearly indicated the priorities varied from district to district. The inservice education programme to be organised by each DIET needs a careful consideration.

The perception of teachers about the venue of training is presented in Table 5.9. About two third teachers from Raigarh, Sarguja and Shahdol responded about the venue of teacher training. About 50 percent teachers from Bilaspur and Rajnandgaon had an opinion about the venue of the teacher training. The opinion was divided on whether the training should be organized in the school or training institute.

About one-third teachers remained indifferent for the venue of the training. Each venue of training-school or institute -has its own merits and demerits. A careful decision is required for the venue of the training programme

Table 5.9: Perception on Venue of Training

| District | In the Classroom | At the Institute |
|----------|------------------|------------------|
| BPR | 24.80 | 28.70 |
| RGH | 44.10 | 23.60 |
| RNG | 28.30 | 27.40 |
| SGJ | 34.10 | 36.40 |
| SDL | 24.40 | 36.00 |

From the above discussion, it may be concluded that:

1. A large number of teachers did not undergo inservice education in all the districts. More female than male teachers remained without inservice training. Special efforts are required to ensure that all teachers participate in the inservice training.
2. The content and venue of the training should be planned carefully.

AVAILABILITY OF BASIC FACILITY IN THE SCHOOL

Basic facilities required for teaching included a blackboard, a duster and chalk. Teachers were asked to indicate their availability in the school. The data of availability of basic facilities is shown in Table 5.10

Table 5.10: Percentage of Teachers Reporting Availability of Basic Facilities

| District | Basic Facility | Genderwise | | | Locationwise | | |
|----------|----------------------|------------|--------|--------|--------------|--------|--------|
| | | Male | Female | Total | Rural | Urban | Total |
| BPR | Blackboard | 97.30 | 100.00 | 97.70 | 98.10 | 96.40 | 97.70 |
| | Duster | 45.50 | 58.80 | 47.30 | 46.50 | 50.00 | 47.30 |
| | Chalk | 87.50 | 94.10 | 88.40 | 90.10 | 82.10 | 88.40 |
| | Table (for Teachers) | 69.60 | 82.40 | 71.30 | 69.30 | 78.60 | 71.30 |
| | Chair (for teachers) | 87.50 | 94.10 | 88.40 | 86.10 | 96.40 | 88.40 |
| | Cupboard | 07.10 | 11.80 | 07.80 | 05.00 | 17.90 | 07.80 |
| RGH | Blackboard | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| | Duster | 55.40 | 46.70 | 53.90 | 53.30 | 57.10 | 53.90 |
| | Chalk | 85.10 | 66.70 | 82.00 | 85.30 | 64.30 | 82.00 |
| | Table (for Teachers) | 87.80 | 73.30 | 85.40 | 89.30 | 64.30 | 85.40 |
| | Chair (for teachers) | 91.90 | 80.00 | 89.90 | 92.00 | 78.60 | 89.90 |
| | Cupboard | 17.60 | 40.00 | 21.30 | 14.70 | 57.10 | 21.30 |
| RNG | Blackboard | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| | Duster | 66.20 | 53.10 | 62.30 | 63.80 | 57.70 | 62.30 |
| | Chalk | 97.30 | 100.00 | 98.10 | 97.50 | 100.00 | 98.10 |
| | Table (for Teachers) | 87.80 | 78.10 | 84.90 | 91.30 | 65.40 | 84.90 |
| | Chair (for teachers) | 98.60 | 96.90 | 98.10 | 97.50 | 100.00 | 98.10 |
| | Cupboard | 24.30 | 21.90 | 23.60 | 25.00 | 19.20 | 23.60 |

(Contd..)

Table 5.10: Percentage of Teachers Reporting Availability of Basic Facilities

| District | Basic Facility | Genderwise | | | Locationwise | | |
|----------|----------------------|------------|--------|-------|--------------|--------|-------|
| | | Male | Female | Total | Rural | Urban | Total |
| SGJ | Blackboard | 93.00 | 100.00 | 94.30 | 91.80 | 100.00 | 94.30 |
| | Duster | 47.90 | 58.80 | 50.00 | 39.30 | 74.10 | 50.00 |
| | Chalk | 83.10 | 94.10 | 85.20 | 78.70 | 100.00 | 85.20 |
| | Table (for Teachers) | 77.50 | 94.10 | 80.70 | 77.00 | 88.90 | 80.70 |
| | Chair (for teachers) | 90.10 | 100.00 | 92.00 | 88.50 | 100.00 | 92.00 |
| | Cupboard | 28.20 | 11.80 | 25.00 | 24.60 | 25.90 | 25.00 |
| SDL | Blackboard | 84.60 | 71.40 | 81.40 | 87.50 | 63.60 | 81.40 |
| | Duster | 46.20 | 42.90 | 45.30 | 43.80 | 50.00 | 45.30 |
| | Chalk | 76.90 | 76.20 | 76.70 | 76.60 | 77.30 | 76.70 |
| | Table (for Teachers) | 73.80 | 20.00 | 69.80 | 78.60 | 50.00 | 69.80 |
| | Chair (for teachers) | 80.00 | 71.40 | 77.90 | 82.80 | 63.60 | 77.90 |
| | Cupboard | 07.70 | 04.80 | 07.00 | 07.80 | 04.50 | 07.00 |

Many schools in these five districts were covered under Operation Blackboard. Still 19 per cent teachers from Shahdol reported the non-availability of blackboards. Surprisingly, 63 per cent teachers from urban areas reported the availability of blackboard. There appears to be a difference in the availability of blackboards to the teachers. Female teachers from Shahdol (71.4%) reported the availability of blackboards. The availability of a chalk should be viewed with the availability of a blackboard. In fact, when the blackboard is available and the chalk is not available, the blackboard is useless. The percentage of teachers reporting availability of chalks varied from 76.7 in Shahdol to 98.1 in Rajnandgaon. The other side of the picture may also be seen. Chalks are not available to teachers of Bilaspur (12%), Raigarh (18%), Rajnandgaon (2%), Sarguja (15%) and Shahdol (23%).

The availability of a duster is equally important for a teacher. Above 50 per cent teachers have reported the availability of dusters in the schools. There is a need to make duster available to the teachers.

Less than 10 per cent teachers have reported the availability of cupboards in the schools in Bilaspur and Shahdol. In Raigarh, Rajnandgaon and Sarguja more than 20 per cent teachers have got cupboards in the schools.

Teachers were asked to report the availability of various teaching aids in the school. The data is presented in Table 5.11.

Table 5.11: Percentage of Teachers Reporting Availability of Teaching Aids

| Teaching Aids | Districts | | | | |
|----------------------------|-----------|-------|-------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Teachers' Guide | 55.80 | 44.90 | 63.20 | 44.30 | 45.30 |
| Dictionary | 28.70 | 38.20 | 80.20 | 47.70 | 38.40 |
| Map | 72.10 | 75.30 | 88.70 | 77.30 | 47.90 |
| Globe | 60.50 | 66.30 | 84.00 | 65.90 | 45.30 |
| Charts | 65.90 | 59.60 | 83.00 | 72.70 | 50.00 |
| Flash Cards | 05.40 | 20.20 | 18.90 | 10.20 | 12.80 |
| Science Kit | 65.90 | 71.90 | 90.60 | 70.50 | 69.80 |
| Mathematics Kit | 53.50 | 68.50 | 81.10 | 65.90 | 46.50 |
| Books other than Textbooks | 33.30 | 69.70 | 85.80 | 65.90 | 50.00 |
| Others | 27.10 | 29.20 | 52.80 | 11.40 | 20.90 |

The percentage of teachers reporting the availability of a teachers' guide varied from 44.3 in Sarguja to 63.2 in Rajnandgaon. On an average, 50 per cent teachers reported the availability of a teachers' guide. Efforts are needed to provide teachers' guides to all the teachers.

The dictionary was available to 28.7 per cent teachers of Bilaspur and 80.2 per cent teachers of Rajnandgaon. The efforts are required to provide dictionaries to all the teachers. The teachers have also reported the availability of books other than textbooks. The percentage ranged from 33.3 in Bilaspur to 85.8 in Rajnandgaon. The other teaching aids reported available to the teachers included a map, a globe, flashcards, and science and mathematics kits. The availability of science and mathematics kits did not assure their use. Special efforts are required to put these kits to use in the classroom. A wrong notion has been given that with the inclusion of environmental science in the school curriculum, the use of science should need to be minimum. This is not correct as it checks the habit of experimentation within the four walls of the school.

From the above discussion, it may be concluded that:

1. Basic facilities like a chalk, a duster and a blackboard should be made available in all the schools.
2. Teaching aids should also be made available in all the schools.

Teachers have to be motivated to use these teaching aids while teaching in the classroom

MULTIGRADE TEACHING

Teaching practice in multigrade situation is presented in Table 5.12. The percentage of teachers reporting simultaneous teaching varied from 66 in Rajnandgaon to 75.6 in Shahdol. In Bilaspur district 40 per cent teachers reported multigrade teaching. This throws light on the availability of teachers according to number of classrooms.

Table 5.12: Teaching Practice in Multigrade Situation.

| District | Percentage of Teachers | | |
|----------|------------------------|--------|-------|
| | Male | Female | Total |
| BPR | 42.90 | 17.60 | 39.50 |
| RGH | 74.30 | 53.30 | 70.80 |
| RNG | 75.70 | 43.80 | 66.00 |
| SGJ | 71.80 | 41.20 | 65.90 |
| SDL | 83.10 | 52.40 | 75.60 |

More male teachers work in multigrade situation than female teachers. The activities in multigrade teaching were converted into teaching tasks and the teachers were asked to report on them. Table 5.13 shows the percentage of teaching tasks performed by the teachers. A large percentage of teachers from all the five districts assigned copy work to the students. The percentage ranged from 56 in Bilaspur to 82 per cent in Raigarh. In the urban areas of districts of Raigarh and Sarguja 100 per cent teachers follow this technique. Many teachers have reported that they asked children to supervise the work of younger children. The percentage varied from 3.3 in Raigarh to 19.5 in Bilaspur.

Multigrade teaching requires special training. Special facilities like blackboards are required for all the classes.

From the above discussion, it may be concluded that:

1. More than two-third teachers in Raigarh, Rajnandgaon, Sarguja and Shahdol followed multigrade teaching. In Bilaspur about 40 per cent teachers observed this strategy.
2. Teachers should be provided special training for multigrade teaching in all the districts

Table 5.13: Teaching Tasks Given to Other Groups While Teacher Teaches One Group in Multigrade Teaching Setting (in Per cent)

| District | Categories | Genderwise | | | Locationwise | | |
|----------|-------------------------------|------------|--------|-------|--------------|--------|-------|
| | | Male | Female | Total | Rural | Urban | Total |
| BPR | Copy Work | 53.80 | 100.00 | 56.10 | 52.80 | 80.00 | 56.10 |
| | Wait, Work on their own, Play | 17.90 | 00.00 | 17.10 | 16.70 | 20.00 | 17.10 |
| | Supervision by Older Children | 20.50 | 00.00 | 19.50 | 22.00 | 00.00 | 19.50 |
| | Others | 07.71 | 00.00 | 07.30 | 08.30 | 00.00 | 07.30 |
| RGH | Copy Work | 83.30 | 71.40 | 82.00 | 80.70 | 100.00 | 82.00 |
| | Wait, Work on their own, Play | 07.40 | 28.60 | 09.80 | 10.50 | 00.00 | 09.80 |
| | Supervision by Older Children | 03.70 | 00.00 | 03.30 | 03.50 | 00.00 | 03.30 |
| | Others | 05.60 | 00.00 | 04.90 | 05.30 | 00.00 | 04.90 |
| RNG | Copy Work | 73.20 | 76.90 | 73.90 | 73.80 | 75.00 | 73.90 |
| | Wait, Work on their own, Play | 12.50 | 15.40 | 13.00 | 12.30 | 25.00 | 13.00 |
| | Supervision by Older Children | 14.30 | 07.70 | 13.00 | 13.80 | 00.00 | 13.00 |
| | Others | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| SGJ | Copy Work | 73.50 | 100.00 | 76.80 | 71.10 | 100.00 | 76.80 |
| | Wait, Work on their own, Play | 06.00 | 00.00 | 05.40 | 06.70 | 00.00 | 05.40 |
| | Supervision by Older Children | 16.30 | 00.00 | 14.30 | 17.80 | 00.00 | 14.30 |
| | Others | 04.10 | 00.00 | 03.60 | 04.40 | 00.00 | 03.60 |
| SDL | Copy Work | 73.20 | 92.30 | 76.80 | 80.00 | 64.30 | 76.80 |
| | Wait, Work on their own, Play | 08.90 | 07.70 | 08.70 | 07.30 | 14.30 | 08.70 |
| | Supervision by Older Children | 16.10 | 00.00 | 13.00 | 10.90 | 21.40 | 13.00 |
| | Others | 01.80 | 00.00 | 01.40 | 01.80 | 00.00 | 01.40 |

RANKING OF TEACHING ACTIVITIES

Table 5.14 shows the time spent by teachers on different activities. It is evident from the Table that teachers gave top priority to planning and preparation for class (rank 1). The third rank is given to providing feedback to students. The fourth rank is given to holding extra classes. Surprisingly, teachers gave last rank to giving tuition to the children. A look at the Table reveals that correcting tests/homework left at rank 2. Though this is not as visible as in other cases, the districtwise variation in the ranking is visible.

Table 5.14: Ranking of Teachers Activities in Terms of Time Spent

| Activity | BPR | RGH | RNG | SGJ | SDL |
|------------------------------------|-----|-----|-----|-----|-----|
| Giving Tuition to the children | 4 | 5 | 5 | 2 | 5 |
| Providing Feedback | 2 | 1 | 3 | 3 | 3 |
| Correcting Tests/Homework | 5 | 3 | 2 | 5 | 4 |
| Holding Extra Classes | 3 | 4 | 4 | 4 | 2 |
| Planning and Preparation for Class | 1 | 2 | 1 | 1 | 1 |

From the above discussion, it may be concluded that:

1. Teachers devoted maximum time for planning and preparation for the class. This means that they should be provided training in this activity.
2. Teachers' priority for correction of homework need to be modified.

Providing feedback and doing correction work is very important for the improvement of achievement of students.

USE OF TEXTBOOKS AND TEACHING MATERIAL

The teachers were asked to identify the use of instructional material. The percentage responses of teachers using different teaching material is presented in Table 5.15.

The percentage of teachers teaching language from the textbooks varied from 88.4 in Bilaspur to 100 per cent in Raigarh. This shows that almost all the teachers use textbooks during their teaching. Teachers use specially prepared material during the teaching of language but the percentage is very low in Rajnandgaon (0.9%) and Bilaspur (4.7%). The difference in male teachers and female teachers teaching language is invisible as they both depended on the textbook during the teaching. The percentage of teachers teaching mathematics from the textbook ranged from 79.8 per cent in Bilaspur to 97.8 per cent in Raigarh. More female teachers teaching mathematics used mathematics textbooks in the districts of Raigarh, Rajnandgaon, Sarguja and Shahdol than male teachers. In Bilaspur more male teachers depended on textbooks during teaching of mathematics than female teachers. The percentage of teachers using specially prepared material during the teaching of mathematics varied from 2.2 in Raigarh to 17.8 in Bilaspur. At this stage the difference of using of specially prepared material between teachers teaching language and mathematics is

visible. This may be because of the nature of the subject or the initiatives taken by the teachers. More teachers use specially prepared material during teaching of mathematics than teachers teaching language in all the five districts.

Table 5.15: Use of Textbooks and Teaching Material (Genderwise)

| District | Options | Language | | | Maths | | |
|----------|-----------------------------|----------|--------|--------|--------|--------|-------|
| | | M | F | T | M | F | T |
| BPR | Textbooks | 88.40 | 88.20 | 88.40 | 80.40 | 76.50 | 79.80 |
| | Specially Prepared material | 06.30 | 11.80 | 07.00 | 17.40 | 23.50 | 17.80 |
| | Do not teach these subjects | 05.40 | 00.00 | 04.70 | 02.70 | 00.00 | 02.30 |
| RGH | Textbooks | 100.00 | 100.00 | 100.00 | 97.30 | 100.00 | 97.80 |
| | Specially Prepared material | 00.00 | 00.00 | 00.00 | 02.70 | 00.00 | 02.20 |
| | Do not teach these subjects | 00.00 | 00.00 | 00.00 | 100.00 | 00.00 | 00.00 |
| RNG | Textbooks | 98.60 | 100.00 | 99.10 | 83.80 | 87.50 | 84.90 |
| | Specially Prepared material | 01.40 | 00.00 | 00.90 | 16.20 | 12.50 | 15.10 |
| | Do not teach these subjects | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| SGJ | Textbooks | 93.00 | 88.20 | 92.00 | 84.50 | 88.20 | 85.20 |
| | Specially Prepared material | 04.20 | 00.00 | 03.40 | 15.50 | 11.80 | 14.80 |
| | Do not teach these subjects | 00.00 | 11.80 | 02.30 | 00.00 | 00.00 | 00.00 |
| SDL | Textbooks | 93.80 | 95.20 | 94.20 | 83.10 | 90.50 | 84.90 |
| | Specially Prepared material | 03.10 | 00.00 | 02.30 | 15.40 | 04.80 | 12.80 |
| | Do not teach these subjects | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |

From the above discussion it may be concluded that teachers depended on textbooks during teaching of language and mathematics in primary schools. This finding is important for the designers and authors of textbooks at the primary level

The teachers were asked to explain the use of textbook. The percentage of responses provided by the teachers is shown in Table 5.16

Table 5.16: Use of Textbooks by Teachers (in per cent)

| District | Text Used | Total |
|----------|---|--------|
| BPR | Read and Explain from textbooks | 96.10 |
| | Ask children to read aloud | 93.80 |
| | Ask children to read from the textbook on their own | 87.60 |
| | Assign homework from the textbook | 97.70 |
| | Do not use textbooks at all | 00.80 |
| RGH | Read and Explain from textbooks | 98.90 |
| | Ask children to read aloud | 94.40 |
| | Ask children to read from the textbook on their own | 96.60 |
| | Assign homework from the textbook | 100.00 |
| | Do not use textbooks at all | 01.10 |
| RNG | Read and Explain from textbooks | 99.10 |
| | Ask children to read aloud | 97.20 |
| | Ask children to read from the textbook on their own | 93.40 |
| | Assign homework from the textbook | 100.00 |
| | Do not use textbooks at all | 00.00 |
| SGJ | Read and Explain from textbooks | 95.50 |
| | Ask children to read aloud | 94.30 |
| | Ask children to read from the textbook on their own | 89.80 |
| | Assign homework from the textbook | 94.30 |
| | Do not use textbooks at all | 01.10 |
| SDL | Read and Explain from textbooks | 100.00 |
| | Ask children to read aloud | 100.00 |
| | Ask children to read from the textbook on their own | 97.80 |
| | Assign homework from the textbook | 98.80 |
| | Do not use textbooks at all | 01.20 |

Table 5.17: Teachers Reporting Preparation of Teaching Materials (in per cent)

| District | Preparation of Teaching Materials | Genderwise | | | Locationwise | |
|----------|-----------------------------------|------------|--------|-------|--------------|-------|
| | | Male | Female | Total | Rural | Urban |
| BPR | Self | 74.00 | 76.90 | 74.30 | 73.30 | 78.90 |
| | Students | 03.10 | 00.00 | 02.80 | 03.30 | 00.00 |
| | Provided by school | 20.80 | 23.10 | 21.10 | 21.10 | 21.10 |
| | Any other | 02.10 | 00.00 | 01.80 | 02.20 | 00.00 |
| RGH | Self | 38.50 | 30.80 | 37.20 | 38.50 | 30.80 |
| | Students | 09.20 | 00.00 | 07.70 | 09.20 | 00.00 |
| | Provided by school | 52.30 | 69.20 | 55.10 | 52.30 | 69.20 |
| | Any other | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| RNG | Self | 64.40 | 61.50 | 63.60 | 67.90 | 47.60 |
| | Students | 01.40 | 00.00 | 01.00 | 01.30 | 00.00 |
| | Provided by school | 30.10 | 38.50 | 32.30 | 26.90 | 52.40 |
| | Any other | 04.10 | 00.00 | 03.00 | 09.80 | 01.20 |
| SGJ | Self | 45.30 | 14.30 | 38.80 | 47.80 | 19.00 |
| | Students | 03.80 | 07.10 | 04.50 | 02.20 | 09.50 |
| | Provided by school | 50.90 | 78.60 | 56.71 | 50.00 | 71.40 |
| | Any other | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| SDL | Self | 49.00 | 72.70 | 53.20 | 50.00 | 66.70 |
| | Students | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| | Provided by school | 47.10 | 27.30 | 43.50 | 46.00 | 33.30 |
| | Any other | 03.90 | 00.00 | 03.20 | 04.00 | 00.00 |

The percentage of teachers using textbooks as 'Read and Explain the Textbook' varied from 95.5 per cent in Sarguja and 100 per cent in Shahdol. The teachers also use the textbook for getting it read aloud by the children. The percentage of teachers using the textbook through this method varied from 93.8 in Bilaspur to 100 per cent in Shahdol. Teachers also use the textbooks to assign the homework. The percentage varied from 94.3 in Sarguja to 100 per cent in Rajnandgaon and Raigarh. A very small percentage of teachers from Bilaspur (0.8%) and Sarguja (1.1%) did not use textbook while teaching.

From the above discussion, it may be concluded that teachers used textbooks in getting it read aloud by the children, assigning homework and asking children to read the textbook on their own. This shows absolute dependence of teachers on textbooks.

The teachers were asked to supply information about the use and preparation of teaching aids. The availability of teaching material in the school is reported in Table 5.17. The percentage of teachers preparing their own teaching material varied from 37.2 in Raigarh to 74.3 in Bilaspur. It is revealed from the Table that more female teachers prepared their own teaching material in all the districts except Raigarhand Sarguja. In Raigarh more male teachers prepared their teaching material than female teachers. The percentage of schools providing teaching material varied from 21.1 in Bilaspur to 56.7 in Sarguja. Surprisingly, more female teachers have reported that teaching material is supplied by the schools in Bilaspur, Raigarh, Rajnandgaon. In Sarguja and Shahdol more male teachers have reported the supply of teaching material by the school. Teachers have also reported that teaching materials were provided by the students. The percentage varied from nil in Shahdol to 7.7 in Raigarh. The rural-urban differences in the availability of teaching material is sharply visible in Rajnandgaon, Shahdol and Sarguja.

From the above discussion, it may be concluded that:

1. A large number of teachers (more than 90%) used textbooks while teaching in the classroom. They simply read and explained from the textbook
2. Teachers used the teaching material provided by the schools.
3. Teachers did prepare teaching aids. It was not clear from where they got the material.

The need of the hour is to provide material to teachers for preparation of teaching aids. Alternatively, teachers should be authorised to spend a fixed amount which will be reimbursed by the school.

HOMEWORK

The percentage of teachers giving homework to the students in different districts is shown in Table 5.18. The percentage of teachers giving homework to the students regularly varied from 59.1 in Sarguja to 90.6 in Rajnandgaon. The teachers regularly asked the students to complete the homework

Table 5.18: Percentage Distribution of Teachers Giving Homework

| Homework given | Percentage of Teachers | | | | |
|----------------|------------------------|-------|-------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Regularly | 85.30 | 69.70 | 90.60 | 59.10 | 61.60 |
| Sometimes | 14.70 | 30.30 | 09.40 | 39.80 | 34.90 |
| Not at all | 00.00 | 00.00 | 00.00 | 01.10 | 03.50 |

The percentage of teachers giving homework sometimes varied from 9.4 in Rajnandgaon to 39.8 in Sarguja. A very small percentage of teachers did not give homework to the students. It is evident from the Table that a large number of teachers do give homework to the children in primary schools.

The teachers were asked to supply the number of questions given to the students in homework. The tabulated data is given in percentage in Table 5.19. A look at the Table reveals that the percentage of teachers giving 1 to 3 questions varied from 28.5 in Sarguja to 48.3 in Raigarh. The percentage of teachers who gave 4 to 6 questions varied from 44.9 in Bilaspur to 64.8 in Sarguja. More female teachers gave 1 to 3 questions in mathematics than male teachers while more male teachers gave 4 to 6 questions in homework in all the districts except Raigarh. In Raigarh 67 per cent female teachers gave 4 to 6 questions in homework in comparison to 47.4 by male teachers.

**Table 5.19: Percentage Distribution of Teachers Giving Homework in Mathematics
(in terms of number of sums)**

| District | Number of Sums | Genderwise | | | Locationwise | | |
|----------|----------------|------------|--------|-------|--------------|-------|-------|
| | | Male | Female | Total | Rural | Urban | Total |
| BPR | 0 | 02.70 | 00.00 | 02 30 | 01 10 | 07 10 | 02 30 |
| | 1-3 | 45.60 | 58.80 | 47 30 | 45.60 | 53.61 | 47.30 |
| | 4-6 | 45.60 | 41 20 | 44 90 | 46.60 | 39.20 | 42 60 |
| | 7-9 | 03.60 | 00.00 | 03.10 | 04 00 | 00 00 | 03 10 |
| | 10-15 | 02.70 | 00 00 | 02.40 | 03 00 | 00 00 | 02 40 |
| RGH | 0 | 00.00 | 00.00 | 00 00 | 00 00 | 00.00 | 00 00 |
| | 1-3 | 51.40 | 33.30 | 48.30 | 52 00 | 28 50 | 48 30 |
| | 4-6 | 47.40 | 66.60 | 50.60 | 46 70 | 71.40 | 50 60 |
| | 7-9 | 00.00 | 00.00 | 00 00 | 00.00 | 00.00 | 00.00 |
| | 10-15 | 01.40 | 00.00 | 01 10 | 01 30 | 00 00 | 01 10 |
| RNG | 0 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00 00 |
| | 1-3 | 36.50 | 37.50 | 36.80 | 40.10 | 26 90 | 36 80 |
| | 4-6 | 58 10 | 53 20 | 56.60 | 55 10 | 61 60 | 56.50 |
| | 7-9 | 04.10 | 06.30 | 04.70 | 03.80 | 07.70 | 02.80 |
| | 10-15 | 01.40 | 03.10 | 01.90 | 01.30 | 03.80 | 01.90 |
| SGJ | 0 | 05.60 | 05.90 | 05.70 | 04.90 | 07.40 | 05.70 |
| | 1-3 | 25.40 | 41.20 | 28.50 | 27.80 | 29 60 | 28.50 |
| | 4-6 | 67.60 | 52.90 | 64.80 | 65.60 | 62.90 | 64.80 |
| | 7-9 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| | 10-15 | 01.40 | 00.00 | 01.10 | 01.60 | 00.00 | 01.10 |
| SDL | 0 | 04.60 | 04.80 | 04.70 | 04.70 | 04.50 | 04.70 |
| | 1-3 | 40.50 | 57.10 | 44 24 | 40.70 | 54.50 | 44.20 |
| | 4-6 | 50.70 | 28.50 | 45 30 | 48.50 | 36.30 | 45 30 |
| | 7-9 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 |
| | 10-15 | 04 60 | 09 50 | 05 80 | 06 30 | 04 50 | 06 30 |

**Table 20: Percentage Distribution of Teachers Giving Homework in Language
(in terms of number of pages)**

| District | No of Pages | Genderwise | | | Locationwise | | |
|----------|---------------|------------|--------|-------|--------------|-------|-------|
| | | Male | Female | Total | Rural | Urban | Total |
| BPR | Zero | 04 50 | 00 00 | 03 90 | 02 00 | 10 70 | 03 90 |
| | One | 57 10 | 70 60 | 58 90 | 54 50 | 75 00 | 58 90 |
| | Two | 26 80 | 11 80 | 24 80 | 26 70 | 10 70 | 24 80 |
| | Three | 04 50 | 11 80 | 05 40 | 06 90 | 00 00 | 05 40 |
| | Four | 00 90 | 05 90 | 01 60 | 01 00 | 03 60 | 01 60 |
| | Five and more | 06 30 | 00 00 | 05 50 | 06 90 | 00 00 | 05 50 |
| RGH | Zero | 00 00 | 00 00 | 00 00 | 0 00 | 00 00 | 00 00 |
| | One | 77 00 | 73 30 | 76 40 | 74 70 | 85 70 | 76 40 |
| | Two | 21 60 | 26 70 | 22 50 | 24 00 | 14 30 | 22 50 |
| | Three | 01 40 | 00 00 | 01 10 | 01 30 | 00 00 | 01 10 |
| | Four | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 |
| | Five and more | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 |
| RNG | Zero | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 |
| | One | 66 20 | 81 31 | 70 80 | 70 00 | 73 10 | 70 80 |
| | Two | 23 00 | 09 40 | 18 90 | 20 00 | 15 40 | 18 90 |
| | Three | 04 10 | 03 10 | 03 20 | 03 80 | 03 80 | 03 80 |
| | Four | 02 70 | 03 10 | 02 80 | 03 80 | 00 00 | 02 80 |
| | Five and more | 04 10 | 03 10 | 03 70 | 02 50 | 07 60 | 03 70 |
| SGJ | Zero | 05 60 | 11 80 | 06 80 | 06 60 | 07 40 | 06 80 |
| | One | 56 30 | 58 80 | 56 80 | 55 70 | 59 30 | 56 80 |
| | Two | 33 80 | 29 40 | 33 00 | 32 80 | 33 30 | 33 00 |
| | Three | 02 80 | 00 00 | 02 30 | 03 30 | 00 00 | 02 30 |
| | Four | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 |
| | Five and more | 01 40 | 00 00 | 01 10 | 01 60 | 00 00 | 01 10 |
| SDL | Zero | 06 20 | 04 80 | 06 30 | 06 30 | 04 50 | 05 80 |
| | One | 58 50 | 66 71 | 60 50 | 56 30 | 72 70 | 60 50 |
| | Two | 30 80 | 28 60 | 30 20 | 32 80 | 22 70 | 30 20 |
| | Three | 04 60 | 00 00 | 03 50 | 04 70 | 00 00 | 03 50 |
| | Four | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 |
| | Five and More | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 |

Teachers from the urban area giving 1 to 3 questions in mathematics varied from 26.9 in Rajnandgaon to 71.4 in Raigarh. In the rural area the percentage of teachers giving 1 to 3 questions in homework varied from 27.8 in Sarguja to 52 per cent in Raigarh.

From the above discussion, it may be concluded that a large number of teachers gave homework in mathematics. The number of mathematics questions given in homework may be 1 to 3 and 4 to 6. Teachers according to the gender or location subscribed to either of the patterns.

The percentage distribution of teachers giving homework in language is presented in Table 5 20. It is revealed from the Table that a large number of teachers gave one page for reading in homework. The percentage varied from 58.9 in Bilaspur to 76.4 in Raigarh. More female teachers from all the districts gave one page homework in language than male teachers in all the districts except in Raigarh. In Raigarh more male teachers (77%) gave one page homework than female teachers (73%).

The percentage of teachers giving two-page reading as homework varied from 18.9 in Rajnandgaon to 33 in Sarguja.

More teachers from the urban area gave one page reading as homework than teachers from the rural area. More teachers from the rural area gave two-page reading in homework than teachers from the urban area.

From the above discussion, it may be concluded that:

1. A large number of teachers assigned homework to students in language and mathematics.
2. A homework time Table needs to be designed for each school so that students are not burdened.
3. Teachers who were not assigning homework should be motivated to plan for homework regularly.

COMPETENCIES OF STUDENTS

Teachers expected their students to read and write a composition in Class V. The expectations of teachers were tabulated which are presented in table 5.21

Table 5.21: Teachers' Expectations of Students' Competencies

| Class | Competency | | BPR | RGH | RNG | SGJ | SDL |
|-------|--------------------------------------|--------------|-------|-------|-------|-------|-------|
| I | Recognize all Alphabets | Below 40 | 03.00 | 05.90 | 45.00 | 38.40 | 19.60 |
| | | 41 - 79 | 32.80 | 60.90 | 50.60 | 44.20 | 50.00 |
| | | 80 and above | 64.20 | 33.20 | 44.90 | 17.40 | 30.40 |
| II | Take dictation of words | Below 40 | 00.00 | 17.20 | 08.80 | 56.70 | 32.90 |
| | | 41 - 79 | 49.30 | 46.30 | 59.40 | 28.90 | 51.60 |
| | | 80 and above | 50.70 | 36.50 | 31.80 | 14.40 | 15.50 |
| III | Write simple Sentences | Below 40 | 01.40 | 09.80 | 10.40 | 50.20 | 41.60 |
| | | 41 - 79 | 49.20 | 51.10 | 57.20 | 28.70 | 31.70 |
| | | 80 and above | 49.40 | 40.10 | 32.40 | 21.10 | 26.70 |
| IV | Read text and answer questions on it | Below 40 | 05.60 | 10.20 | 08.50 | 49.00 | 30.00 |
| | | 41 - 79 | 50.70 | 57.20 | 44.00 | 36.00 | 45.80 |
| | | 80 and above | 43.70 | 32.60 | 47.50 | 25.00 | 24.20 |
| V | Write a small composition | Below 40 | 10.30 | 13.90 | 13.40 | 41.00 | 34.90 |
| | | 41 - 79 | 36.60 | 57.90 | 55.50 | 28.80 | 37.20 |
| | | 80 and above | 52.10 | 28.20 | 30.70 | 30.20 | 27.90 |

In Class I Sixty four teachers of Bilaspur district schools expected that in their class more than 80 per cent students will recognize all the alphabets. In Raigarh, about 30 per cent teachers expected their 80 per cent students to recognise all the letters. About 17 per cent teachers in Sarguja thought that more than 80 per cent students are capable of recognizing all the letters.

The results of the achievement of students in Class II are presented in the Chapter 7 There existed a wide gap between teachers expectations and students performance.

SUPERVISION

Supervision is the backbone for improvement in any system. The teachers were asked to report about the position of supervision. The percentage of distribution of teachers reporting no classroom supervision is given in Table 5.22. It is revealed from the Table that the percentage of teachers reporting no supervision by Block Education Officer (BEO) varied from 68.2 in Bilaspur to 95.5 in Sarguja. During the informal meeting with the BEOs it was pointed out that the BEOs were expected to visit the schools at least once in three months. It is indicated from the Table that a large number of classrooms remained unsupervised by the BEOs.

Table 5.22: Percentage of Teachers Reporting No Classroom Supervision

| Districts | Head Teacher | BEO |
|-----------|--------------|-------|
| BPR | 52.70 | 68.20 |
| RGH | 75.30 | 83.10 |
| RNG | 52.80 | 92.50 |
| SGJ | 65.90 | 95.50 |
| SDL | 61.60 | 70.90 |

The percentage of teachers reporting no supervision by the head teacher varied from 52.7 in Bilaspur to 75.3 in Raigarh. The headmaster worked in the same school, still he was not able to supervise the classroom. The matter is to be looked into by the State Government.

From the above discussion, it may be concluded that:

1. The schools were not supervised by the BEOs.
2. The head teachers also do not supervise the classroom teaching in a large number of schools.
3. In comparison to the BEO the head teacher supervised the classroom teaching.
4. The head teachers and the BEOs need to supervise the classroom teaching.

REASONS FOR BEING IN THE PRESENT SCHOOL

The percentage of teachers reporting reasons for being in the present school are given in Table 5.23. The percentage of teachers reporting personal and family reasons for being in the school varied from 33.7 in Raigarh to 45.3 in Shahdol. More female teachers from Bilaspur, Rajnandgaon and Shahdol reported this reason. This shows that they are working in the present school because of the personal and family reasons

Table 5.23: Percentage of Teachers and their Reasons for being in the Present School

| Districts | Reasons | Percentage of Teachers | | |
|-----------|-----------------------------------|------------------------|--------|-------|
| | | Male | Female | Total |
| BPR | Personal and Family | 35.70 | 58.80 | 38.80 |
| | Compulsory Transfer | 36.60 | 11.80 | 33.30 |
| | Higher Salary and Benefits | 02.70 | 00.00 | 02.30 |
| | Greater Job Security | 02.70 | 00.00 | 02.30 |
| | Greater Job Satisfaction | 11.60 | 17.60 | 12.40 |
| | Less Work Load and Responsibility | 04.50 | 00.00 | 03.90 |
| | Other Reasons | 04.50 | 05.90 | 04.70 |
| RGH | Personal and Family | 33.80 | 33.30 | 33.70 |
| | Compulsory Transfer | 55.40 | 60.00 | 56.20 |
| | Higher Salary and Benefits | 04.10 | 00.00 | 03.40 |
| | Greater Job Security | 01.40 | 06.70 | 02.20 |
| | Greater Job Satisfaction | 04.10 | 00.00 | 03.40 |
| | Less Work Load and Responsibility | 00.00 | 00.00 | 00.00 |
| | Other Reasons | 00.00 | 00.00 | 00.00 |
| RNG | Personal and Family | 27.00 | 50.00 | 34.00 |
| | Compulsory Transfer | 51.40 | 21.90 | 42.50 |
| | Higher Salary and Benefits | 04.10 | 09.40 | 05.70 |
| | Greater Job Security | 02.70 | 03.10 | 02.80 |
| | Greater Job Satisfaction | 04.10 | 03.10 | 03.80 |
| | Less Work Load and Responsibility | 00.00 | 06.30 | 01.90 |
| | Other Reasons | 06.80 | 06.30 | 06.60 |

(Contd. on next page)

Table 5.23: Percentage of Teaching According to Reasons for being in the Present School

| Districts | Reasons | Percentage of Teachers | | |
|-----------|---------------------------------|------------------------|--------|-------|
| | | Male | Female | Total |
| SGJ | Personal and Family | 40.80 | 29.40 | 38.60 |
| | Compulsory Transfer | 06.60 | 29.40 | 35.20 |
| | Higher Salary and Benefits | 04.20 | 11.80 | 05.70 |
| | Greater Job Security | 01.40 | 00.00 | 01.10 |
| | Greater Job Satisfaction | 12.70 | 23.50 | 14.80 |
| | Less Work Load & Responsibility | 01.40 | 00.00 | 01.10 |
| | Other Reasons | 02.80 | 05.90 | 03.40 |
| SDL | Personal and Family | 41.50 | 57.10 | 45.30 |
| | Compulsory Transfer | 38.50 | 28.60 | 36.00 |
| | Higher Salary and Benefits | 06.20 | 04.80 | 05.80 |
| | Greater Job Security | 00.00 | 00.00 | 00.00 |
| | Greater Job Satisfaction | 04.60 | 04.80 | 04.70 |
| | Less Work Load & Responsibility | 01.50 | 00.00 | 01.20 |
| | Other Reasons | 07.70 | 04.80 | 07.00 |

The percentage of teachers reporting compulsory transfer was one of the reasons for being in the present school which varied from 33 in Bilaspur to 56 in Raigarh. The percentage of female teachers reporting compulsory transfer as a reason for being in the present school varied from 11.8 in Bilaspur to 60 per cent in Raigarh. The percentage of male teachers reporting this reason varied from 6.6 in Sarguja to 55.4 in Raigarh. This reason is very important as it indicated the policy of transfer and posting. During the discussion with the teachers it was informally reported that teachers were afraid of transfer. Some teachers wanted transfer and some teachers did not want transfer. The transfer policy needs to be transparent.

The other reasons for being in the present school reported were higher salary and benefits greater job security, greater job satisfaction and less work load and responsibility. All these reasons, taking one at a time, were reported by less than 10 per cent teachers.

ACADEMIC HELP

The distribution of teachers according to the extent of help received from the head teacher is presented in Table 5.24 according to gender and location. A substantial number of teachers (one third to half) felt that the item is not applicable to them as they did not expect any help from the head teacher. The percentage of teachers perceiving head teacher as 'very helpful' was 30 in Bilaspur, 25 in Raigarh, 37 in Rajnandgaon, 26 in Sarguja and 26 in Shahdol. Female teachers identified the head teacher as more helpful than male teachers in all the districts. About 10 per cent teachers perceived the head teacher as 'not helpful'. The perception of teachers from the rural and urban areas was different. It showed a mixed trend. Teachers from the urban area of Bilaspur, Raigarh, Rajnandgaon and Sarguja felt that the head teacher is 'very helpful' than the teachers from the rural area of these districts.

The head teacher is a leader in the school. The indifferent attitude of the teachers about the head teacher was indicated by the percentage of non-applicability of the item is a cause of concern to all. The head teacher is expected to provide leadership in academic matters. This may be a contributing factor towards the low achievement of students in the school. Special efforts are required to change the attitude of teachers. Similarly, the head teacher should also be provided training to win the confidence of the teachers.

The distribution of teachers according to the extent of help received from the Block Education Officer is shown in terms of percentage in Table 5.25. Less than one per cent teachers felt that the item is not applicable to them. The percentages of teachers perceiving Block Education Officer as 'very helpful' were 11.6 in Bilaspur, 5.6 in Raigarh, 4.7 in Rajnandgaon, 10.2 in Sarguja and 5.8 in Shahdol.

The Block Education Officer is expected to provide academic guidance to the teachers. The indifferent attitude of teachers towards the Block Education Officer is a matter of serious concern. Efforts should be made to review the functioning of the Block Education Officer in all the districts. The percentage of female teachers perceiving Block Education Officer 'not helpful' was higher than the percentage of male teachers in this category in all the districts. This indicated the gender bias of female teachers towards the Block Education Officer. There is a need to appoint women as Block Education Officers in many blocks.

Table 5.24: Percentage of Teachers Reporting Help Received from the Head Teacher

| District | Categories | Genderwise | | | Locationwise | |
|----------|------------------|------------|--------|-------|--------------|-------|
| | | Male | Female | Total | Rural | Urban |
| BPR | Not Applicable | 37.50 | 00.00 | 32.60 | 35.60 | 21.40 |
| | Very Helpful | 26.80 | 52.90 | 30.20 | 29.70 | 32.10 |
| | Somewhat Helpful | 29.50 | 23.50 | 28.70 | 27.70 | 32.10 |
| | Not Helpful | 06.30 | 23.50 | 08.50 | 06.90 | 14.30 |
| RGH | Not Applicable | 45.90 | 20.00 | 41.60 | 44.00 | 28.60 |
| | Very Helpful | 21.60 | 40.00 | 24.70 | 22.70 | 35.70 |
| | Somewhat Helpful | 28.40 | 26.70 | 28.10 | 26.70 | 35.70 |
| | Not Helpful | 04.10 | 13.30 | 05.60 | 06.70 | 00.00 |
| RNG | Not Applicable | 48.60 | 18.80 | 39.60 | 45.00 | 23.10 |
| | Very Helpful | 32.40 | 46.90 | 36.80 | 36.30 | 38.50 |
| | Somewhat Helpful | 14.90 | 34.40 | 20.80 | 16.30 | 34.60 |
| | Not Helpful | 04.10 | 00.00 | 02.80 | 02.50 | 03.80 |
| SGJ | Not Applicable | 52.10 | 17.60 | 45.50 | 54.10 | 25.90 |
| | Very Helpful | 25.40 | 29.40 | 26.10 | 23.00 | 33.30 |
| | Somewhat Helpful | 12.70 | 11.80 | 12.50 | 14.80 | 07.40 |
| | Not Helpful | 09.90 | 41.20 | 15.90 | 08.20 | 33.30 |
| SDL | Not Applicable | 49.20 | 28.60 | 44.20 | 45.20 | 40.90 |
| | Very Helpful | 24.60 | 28.60 | 25.60 | 31.30 | 09.10 |
| | Somewhat Helpful | 18.50 | 28.60 | 20.90 | 17.20 | 31.80 |
| | Not Helpful | 07.70 | 14.30 | 09.30 | 06.30 | 18.20 |

Table 5.25: Percentage of Teachers Reporting Help Received from the Block Education Officer (Genderwise)

| District | Categories | Number of Teachers | | |
|----------|------------------|--------------------|--------|-------|
| | | Male | Female | Total |
| BPR | Not Applicable | 00.90 | 00 00 | 00 80 |
| | Very Helpful | 12.50 | 05 90 | 11.60 |
| | Somewhat Helpful | 41 10 | 23.50 | 38 80 |
| | Not Helpful | 45 50 | 70 60 | 48.80 |
| RGH | Not Applicable | 00 00 | 00 00 | 00 00 |
| | Very Helpful | 04 10 | 13 30 | 05.60 |
| | Somewhat Helpful | 54.10 | 33.30 | 50.60 |
| | Not Helpful | 41.90 | 53 30 | 43.80 |
| RNG | Not Applicable | 00 0 | 00 00 | 00.00 |
| | Very Helpful | 05.40 | 03.10 | 04 70 |
| | Somewhat Helpful | 54.10 | 56.30 | 54 70 |
| | Not Helpful | 40 50 | 40.60 | 40.60 |
| SGL | Not Applicable | 01.40 | 00 00 | 01 10 |
| | Very Helpful | 09 90 | 11 80 | 10.20 |
| | Somewhat Helpful | 47 90 | 05.90 | 39 80 |
| | Not Helpful | 40.80 | 82.40 | 48.90 |
| SDL | Not Applicable | 01.50 | 00 00 | 01.20 |
| | Very Helpful | 04.60 | 09.50 | 05.80 |
| | Somewhat Helpful | 24.60 | 04.80 | 19.80 |
| | Not Helpful | 69 20 | 85.70 | 73.30 |

The distribution of teachers according to help received from colleagues is presented in Table 5.26. About 80 per cent teachers from Bilaspur, Raigarh and Rajnandgaon felt that colleagues are helpful. The perception of female teachers about their colleagues as 'helpful' was higher than the perception of male teachers. This shows that there is more affinity among female teachers.

Table 5.26: Percentage of Teachers Reporting Help Received from Primary Teachers (Genderwise and Locationwise)

| District | Frequency | Percentage of Teachers | | | | |
|----------|------------------|------------------------|--------|-------|--------------|-------|
| | | Genderwise | | | Locationwise | |
| | | Male | Female | Total | Rural | Urban |
| BPR | Very Helpful | 27.70 | 23.50 | 27.10 | 28.70 | 21.40 |
| | Somewhat Helpful | 57.10 | 70.60 | 58.90 | 56.40 | 67.90 |
| | Not Helpful | 15.20 | 05.90 | 14.00 | 14.90 | 10.70 |
| RGH | Very Helpful | 28.40 | 40.00 | 30.30 | 29.30 | 35.70 |
| | Somewhat Helpful | 40.50 | 40.00 | 40.40 | 40.00 | 42.90 |
| | Not Helpful | 16.20 | 13.30 | 15.70 | 16.00 | 14.00 |
| RNG | Very Helpful | 35.10 | 28.10 | 33.00 | 30.00 | 31.40 |
| | Somewhat Helpful | 32.40 | 40.60 | 34.90 | 30.00 | 50.00 |
| | Not Helpful | 18.90 | 25.00 | 20.80 | 25.00 | 07.70 |
| SGJ | Very Helpful | 22.50 | 23.50 | 22.70 | 23.00 | 22.20 |
| | Somewhat Helpful | 19.70 | 29.40 | 21.60 | 13.10 | 40.70 |
| | Not Helpful | 29.60 | 47.00 | 33.00 | 31.00 | 37.00 |
| SDL | Very Helpful | 24.60 | 19.50 | 23.30 | 23.40 | 22.70 |
| | Somewhat Helpful | 27.50 | 28.60 | 23.30 | 18.80 | 36.40 |
| | Not Helpful | 35.40 | 47.60 | 38.40 | 40.60 | 31.80 |

The percentage of teachers from the urban area perceived colleagues as more helpful than the percentage of teachers from the rural areas who perceived colleagues as helpful. Table 5.27 shows distribution of teachers according to the extent of help received from colleagues according to caste.

Table 5.27: Distribution of Teachers Reporting Help Received from Primary Teachers (Castewise)

| District | Frequency | Percentage of Teachers | | | |
|----------|------------------|------------------------|-------|-------|--------|
| | | SC | ST | OBC | Others |
| BPR | Very Helpful | 22.20 | 17.60 | 25.00 | 34.80 |
| | Somewhat Helpful | 61.10 | 70.60 | 60.40 | 52.20 |
| | Not Helpful | 16.70 | 11.80 | 14.60 | 13.00 |
| RGH | Very Helpful | 50.00 | 23.50 | 29.70 | 41.70 |
| | Somewhat Helpful | 33.30 | 38.20 | 48.60 | 25.00 |
| | Not Helpful | 00.00 | 20.60 | 13.50 | 16.70 |
| RNG | Very Helpful | 20.00 | 36.80 | 40.80 | 21.70 |
| | Somewhat Helpful | 53.30 | 15.80 | 34.70 | 39.10 |
| | Not Helpful | 20.00 | 31.60 | 12.20 | 30.40 |
| SGJ | Very Helpful | 23.30 | 20.50 | 22.20 | 24.10 |
| | Somewhat Helpful | 16.70 | 11.40 | 33.30 | 34.50 |
| | Not Helpful | 00.00 | 36.40 | 33.30 | 34.50 |
| SDL | Very Helpful | 00.00 | 26.10 | 16.70 | 25.00 |
| | Somewhat Helpful | 00.00 | 17.40 | 41.70 | 22.90 |
| | Not Helpful | 66.70 | 34.50 | 41.70 | 37.50 |

Less than 20 per cent teachers of all groups from Bilaspur and Raigarh perceived colleagues as 'not helpful'. In Shahdol about 67 per cent SC teachers perceived teachers as 'not helpful'. In Sarguja one-third teachers from ST, OBC and Others perceived teachers as 'not helpful'. This indicated that teachers were not a cohesive group in Rajnandgaon, Sarguja and Shahdol. The caste difference was not visible on the surface as the field investigating team has

not reported it into Field Notes. But the response of this item has highlighted it. Others are required to develop affinity among the teachers of the various castes.

From the above discussion, it may be concluded that.

1. The head teacher was not helpful to about 40 to 60 per cent teachers.
2. The perception of male teachers and female teachers was different in the matter of academic help.
3. The Block Education Officer is not helpful to a large number of teachers.
4. Teachers found their own colleagues helpful in a large number of cases
5. A clear-cut pattern in the perception of teachers about academic help was not visible in gender, location and castewise cases.
- 6 All efforts are to be made to support teacher for academic help

The head teachers and the Block Education Officers need training for extending academic help to teachers

PREFERENCE FOR TYPE OF SCHOOL

The preference of teachers for a school for the education of their children is presented in Table 5.28.

A majority of teachers (above 65%) preferred government schools for their children. The one reason may be the availability of government schools in the area. Other reason may be that they cannot afford to send their children to private unaided schools; less than 10 per cent preferred it.

**Table 5.28: Teachers' Preference for School Type for Education of Their Children
(Gender and Locationwise)**

| District | Kind of School | Genderwise | | | Locationwise | | |
|----------|-----------------------|------------|--------|-------|--------------|-------|-------|
| | | Male | Female | Total | Rural | Urban | Total |
| BPR | Government | 67 30 | 37 50 | 65 20 | 70 00 | 48 00 | 65 20 |
| | Private (Aided) | 20 60 | 37 50 | 21 70 | 18 90 | 32 00 | 21 70 |
| | Private (Unaided) | 05 60 | 12 50 | 06 10 | 06 70 | 04 00 | 06 10 |
| | No special preference | 06 50 | 12 50 | 07 00 | 04 40 | 16 00 | 07 00 |
| RGH | Government | 85 10 | 69 20 | 82 50 | 82 10 | 84 60 | 82 50 |
| | Private (Aided) | 10 40 | 15 40 | 11 30 | 10 40 | 15 40 | 11 30 |
| | Private (Unaided) | 03 00 | 15 40 | 05 00 | 06 00 | 00 00 | 05 00 |
| | No special preference | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 |
| RNG | Government | 79 70 | 72 00 | 77 70 | 76 10 | 82 60 | 77 70 |
| | Private (Aided) | 18 80 | 24 00 | 20 20 | 22 50 | 13 00 | 20 20 |
| | Private (Unaided) | 01 40 | 04 00 | 02 10 | 01 40 | 04 30 | 02 10 |
| | No special preference | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 | 00 00 |
| SGJ | Government | 69 80 | 66 70 | 69 30 | 69 20 | 69 60 | 69 30 |
| | Private (Aided) | 19 00 | 25 00 | 20 00 | 19 20 | 21 70 | 20 00 |
| | Private (Unaided) | 04 80 | 00 00 | 04 00 | 03 80 | 04 30 | 04 00 |
| | No special preference | 01 60 | 08 30 | 02 70 | 01 90 | 04 30 | 02 70 |
| SDL | Government | 81 00 | 66 70 | 77 60 | 76 80 | 80 00 | 77 60 |
| | Private (Aided) | 06 90 | 16 70 | 09 20 | 08 90 | 10 00 | 09 20 |
| | Private (Unaided) | 05 20 | 11 10 | 06 60 | 05 40 | 10 00 | 06 60 |
| | No special preference | 01 70 | 00 00 | 01 30 | 01 80 | 00 00 | 01 30 |

THE HEAD TEACHER

The data about the head teacher was also collected to know the activities and responsibilities.

COMPOSITION OF THE SAMPLE

The composition of the sample according to gender, location and caste is presented in Table 5.29. A look at the Table reveals that more than 85 per cent head teachers were male. In Bilaspur, no female head teacher was found in the sample schools.

Table 5.29: Distribution of Head Teacher in Sample Schools

| District | Genderwise | | Locationwise | | Castewise | | | |
|----------|------------|--------|--------------|-------|-----------|-------|-------|--------|
| | Male | Female | Rural | Urban | SC | ST | OBC | Others |
| BPR | 100.00 | 00.00 | 84.40 | 15.60 | 17.80 | 15.60 | 37.80 | 28.90 |
| RGH | 93.10 | 06.90 | 89.20 | 10.80 | 10.80 | 29.70 | 48.60 | 10.80 |
| RNG | 84.80 | 15.20 | 85.70 | 14.30 | 02.40 | 23.80 | 50.00 | 23.80 |
| SGJ | 93.00 | 07.00 | 78.10 | 21.90 | 07.00 | 46.50 | 14.00 | 32.60 |
| SDL | 86.40 | 13.60 | 79.50 | 20.50 | 04.50 | 31.80 | 13.60 | 50.00 |

More ST head teachers were present in the sample than SC head teachers. No clearcut pattern is visible about castewise distribution of head teachers in all the districts. The percentage of OBC head teachers was the highest in Bilaspur, Raigarh and Rajnandgaon. The ST head teachers were maximum in Sarguja. Half of the head teachers were Others in Shahdol district.

ACADEMIC RESPONSIBILITIES OF HEAD TEACHERS

The percentage of head teachers reporting different teaching related activities is given in Table 5.30. The Table also indicates the perception of head teacher about the teaching related activities performed by the Block Education Officer. More than 95 per cent teachers reported checking of diaries, classnotes of teachers, preparation of monthly tests, observation of classroom teaching and checking of homework. The percentage of head teachers reporting holding model classes to assist teachers varied from 72.1 in Sarguja to 94.1 in Raigarh.

Table 5.30: Percentage of Head Teachers Reporting Different Teaching Related Activities

| District | Activities | Head Teacher | | | | | B E O | | |
|----------|---|--------------|--------|--------|--------|--------|--------|--------|--------|
| | | M | F | Total | R | U | R | U | Total |
| BPR | Checking Diaries/Class notes of teacher every week | 88.90 | 00.00 | 88.90 | 86.80 | 100.00 | 78.90 | 57.10 | 75.60 |
| | Preparing Monthly tests | 100.00 | 00.00 | 100.00 | 100.00 | 100.00 | 58.80 | 14.30 | 15.60 |
| | Evaluating results of monthly tests | 97.80 | 00.00 | 97.80 | 97.40 | 100.00 | 23.70 | 71.40 | 31.10 |
| | Observation of classroom teaching & suggesting improvements | 91.10 | 00.00 | 91.10 | 89.50 | 100.00 | 84.20 | 100.0 | 86.70 |
| | Checking Homework of Pupils | 100.00 | 00.00 | 100.00 | 100.00 | 100.00 | 05.30 | 00.00 | 04.40 |
| | Taking a decision on Pupils Promotion | 95.60 | 00.00 | 95.60 | 94.70 | 100.00 | 55.30 | 57.10 | 55.60 |
| | Holding Model classes to assist the teachers | 82.20 | 00.00 | 82.20 | 84.20 | 71.40 | 26.30 | 00.00 | 22.20 |
| RGH | Checking Diaries/Class notes of teacher every week | 94.10 | 100.00 | 94.60 | 93.90 | 100.00 | 88.80 | 100.00 | 83.80 |
| | Preparing Monthly tests | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 00.00 | 02.70 |
| | Evaluating results of monthly tests | 100.00 | 100.00 | 100.00 | 100.00 | 10.00 | 100.00 | 00.00 | 05.40 |
| | Observation of classroom teaching & suggesting improvements | 91.20 | 66.70 | 90.90 | 90.90 | 75.00 | 100.00 | 100.00 | 100.00 |
| | Checking Homework of Pupils | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 18.20 | 50.00 | 21.60 |
| | Taking a decision on Pupils Promotion | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 66.70 | 75.00 | 67.60 |
| | Holding Model classes to assist the teachers | 94.10 | 100.00 | 94.60 | 93.90 | 100.00 | 90.90 | 100.00 | 91.90 |
| RNG | Checking Diaries/Class notes of teacher every week | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 66.70 | 66.70 | 66.70 |
| | Preparing Monthly tests | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 05.60 | 00.00 | 04.80 |
| | Evaluating results of monthly tests | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 27.80 | 00.00 | 23.80 |
| | Observation of classroom teaching & suggesting improvements | 97.20 | 83.30 | 95.20 | 97.20 | 83.30 | 80.60 | 66.70 | 78.60 |
| | Checking Homework of Pupils | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 08.30 | 00.00 | 07.10 |
| | Taking a decision on Pupils Promotion | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 33.10 | 33.10 | 33.10 |
| | Holding Model classes to assist the teachers | 86.10 | 100.00 | 88.10 | 86.10 | 100.00 | 19.40 | 33.30 | 21.40 |

(Contd on next page)

Table 5.30: Percentage of Head Teachers Reporting Different Teaching Related Activities.

| District | Activities | Head Teacher | | | | | B E.O | | |
|----------|---|--------------|--------|--------|--------|--------|--------|--------|--------|
| | | M | F | Total | R | U | R | U | Total |
| SGI | Checking Diaries/Class notes of teacher every week | 80.00 | 100.00 | 81.40 | 77.80 | 100.00 | 30.60 | 42.90 | 32.60 |
| | Preparing Monthly tests | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 02.80 | 14.30 | 04.70 |
| | Evaluating results of monthly tests | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 08.30 | 14.30 | 09.30 |
| | Observation of classroom teaching & suggesting improvements | 80.00 | 100.00 | 81.40 | 77.80 | 100.00 | 36.10 | 85.70 | 44.20 |
| | Checking Homework of Pupils | 95.00 | 66.70 | 93.00 | 94.40 | 85.70 | 05.60 | 14.30 | 07.00 |
| | Taking a decision on Pupils Promotion | 95.00 | 100.00 | 95.30 | 94.40 | 100.00 | 19.40 | 71.40 | 27.90 |
| | Holding Model classes to assist the teachers | 72.50 | 83.30 | 72.10 | 72.20 | 71.40 | 19.40 | 28.60 | 20.90 |
| SDL | Checking Diaries/Class notes of teacher every week | 71.10 | 83.30 | 72.70 | 74.30 | 66.70 | 34.30 | 22.20 | 31.80 |
| | Preparing Monthly tests | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| | Evaluating results of monthly tests | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 05.70 | 00.00 | 04.50 |
| | Observation of classroom teaching & suggesting improvements | 92.10 | 83.30 | 90.90 | 88.60 | 100.00 | 37.10 | 33.30 | 36.40 |
| | Checking Homework of Pupils | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 11.40 | 00.0 | 09.10 |
| | Taking a decision on Pupils Promotion | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 17.10 | 33.30 | 20.50 |
| | Holding Model classes to assist the teachers | 81.60 | 66.70 | 79.50 | 77.10 | 88.90 | 20.00 | 00.00 | 15.90 |

Surprisingly, while head teachers reported the supervision of classrooms, teachers reported no supervision of the classroom.

It may be concluded that the head teacher is not able to supervise classroom teaching of all the teachers in the school. The head teacher needs training in the academic supervision in order to observe classroom teaching of all the teachers.

Table 5.31 represents the percentages of methods used by the head teacher for evaluation. A majority of head teachers (above 56%) reported observation of classes as a method of evaluation. The performance of students in test and examination was the second most popular method of evaluation practised by the head teacher.

Table 5.31: Methods Used by Head Teacher for Evaluation

| District | Methods of Evaluation | Option I (T) | Option II (T) |
|----------|---|--------------|---------------|
| BPR | Observation of Classes | 74.40 | 07.70 |
| | Performance of Students in Tests and Examinations | 12.80 | 20.50 |
| | Checking Classnotes Prepared by Teachers | 07.70 | 48.70 |
| | Reviewing Homework of Students | 05.10 | 20.50 |
| | Any Other | 00.00 | 02.60 |
| RGH | Observation of Classes | 54.30 | 19.40 |
| | Performance of Students in Tests and Examinations | 28.60 | 30.60 |
| | Checking Classnotes Prepared by Teachers | 08.60 | 19.40 |
| | Reviewing Homework of Students | 08.60 | 30.60 |
| | Any Other | 00.00 | 00.00 |
| RNG | Observation of Classes | 71.80 | 10.30 |
| | Performance of Students in Tests and Examinations | 12.80 | 17.90 |
| | Checking Classnotes Prepared by Teachers | 10.30 | 35.90 |
| | Reviewing Homework of Students | 05.10 | 35.90 |
| | Any Other | 00.00 | 00.00 |
| SGJ | Observation of Classes | 56.70 | 15.60 |
| | Performance of Students in Tests and Examinations | 13.30 | 28.10 |
| | Checking Classnotes Prepared by Teachers | 10.00 | 28.10 |
| | Reviewing Homework of Students | 20.00 | 21.90 |
| | Any Other | 00.00 | 06.30 |
| SDL | Observation of Classes | 55.60 | 05.60 |
| | Performance of Students in Tests and Examinations | 25.00 | 22.20 |
| | Checking Classnotes Prepared by Teachers | 05.60 | 22.20 |
| | Reviewing Homework of Students | 08.30 | 47.20 |
| | Any Other | 05.60 | 02.80 |

Ranking of important factors for school performance as perceived by the head teacher is shown in Table 5.32. The clear-cut trend is not visible. The district specific ranking may be taken into consideration for developing the District Primary Education Programme. In Bilaspur and Shahdol the attitude and the commitment of teacher is the most important factor for school performance. In Raigarh and Rajnandgaon the assistance of Block Education Officer and Inspector is the most important factor for school performance. In Sarguja the attitude in cooperation of parents is an important factor for school performance.

Table 5.32: Ranking of Important Factors for School Performance

| District | Factors | Option I (T) | Option II (T) |
|----------|--|-----------------|------------------|
| BPR | The Attitude and Commitment of Teacher | 1 | 1 |
| | The Attitude and Cooperation of Parents | 3 | 3 |
| | The Motivation of Students | 5 | 5 |
| | The ability and motivation of Head teacher | 4 | 4 |
| | The Assistance of the BEO/ADIS | 2 | 2 |
| RGH | The Attitude and Commitment of Teacher | 2 | 2 |
| | The Attitude and Cooperation of Parents | 4 | 4 |
| | The Motivation of Students | 3 | 3 |
| | The ability and motivation of Head teacher | 5 | 5 |
| | The Assistance of the BEO/ADIS | 1 | 1 |
| RNG | The Attitude and Commitment of Teacher | 3 | 3 |
| | The Attitude and Cooperation of Parents | 4 | 4 |
| | The Motivation of Students | 2 | 2 |
| | The ability and motivation of Head teacher | 5 | 5 |
| | The Assistance of the BEO/ADIS | 1 | 1 |
| SGJ | The Attitude and Commitment of Teacher | 2 | 2 |
| | The Attitude and Cooperation of Parents | 1 | 1 |
| | The Motivation of Students | 3 | 3 |
| | The ability and motivation of Head teacher | 5 | 5 |
| | The Assistance of the BEO/ADIS | 4 | 4 |
| SDL | The Attitude and Commitment of Teacher | 1 | 1 |
| | The Attitude and Cooperation of Parents | 3 | 3 |
| | The Motivation of Students | 4 | 4 |
| | The ability and motivation of Head teacher | 5 | 5 |
| | The Assistance of the BEO/ADIS | 2 | 2 |

The percentage of head teachers reporting main responsibilities is shown in Table 5.33. The head teacher has perceived their main responsibilities as to draw up the time table for classes, assigning teachers to different classes, evaluating teachers' performance, establishing standards for students' promotion, establishing homework policies, and adapting syllabus to local conditions. A small percentage of head teachers have perceived appointment and transfer of teachers from the school as a part of their responsibilities. More than 93 per cent head teachers felt their responsibilities to draw the time table for classes. As indicated from the table, the average number of teachers is less than the number of classes in the school and so the teachers are teaching in many classes. Some of the crucial decisions like which class will remain free and which teacher will teach in multigrade situation have to be taken by the head teacher.

Table 5.33: Percentage of Head Teachers Reporting Main Responsibilities for Different School Activities

| District | School Activities | Total |
|----------|--|--------|
| BPR | Drawing up time table for classes | 95.60 |
| | Assigning teachers to different classes | 93.30 |
| | Deciding on expenditure in instructional aids | 64.40 |
| | Appointing teachers to the school | 02.20 |
| | Dismissing/transferring teachers from the school | 02.20 |
| | Evaluating teachers' performance | 91.10 |
| | Establishing standards for students' promotion | 91.10 |
| | Establishing Homework Policies | 100.00 |
| | Adapting syllabus to local conditions | 71.10 |
| | Getting extra funds for the school | 15.60 |
| RGH | Drawing up time table for classes | 94.60 |
| | Assigning teachers to different classes | 94.60 |
| | Deciding on expenditure in instructional aids | 73.00 |
| | Appointing teachers to the school | 00.00 |
| | Dismissing/transferring teachers from the school | 00.00 |
| | Evaluating teachers' performance | 91.90 |
| | Establishing standards for students' promotion | 97.30 |
| | Establishing Homework Policies | 100.00 |
| | Adapting syllabus to local conditions | 62.20 |
| | Getting extra funds for the school | 27.00 |
| RNG | Drawing up time table for classes | 100.00 |
| | Assigning teachers to different classes | 95.20 |
| | Deciding on expenditure in instructional aids | 59.50 |
| | Appointing teachers to the school | 02.40 |
| | Dismissing/transferring teachers from the school | 02.40 |
| | Evaluating teachers' performance | 90.50 |
| | Establishing standards for students' promotion | 100.00 |
| | Establishing Homework Policies | 100.00 |
| | Adapting syllabus to local conditions | 61.90 |
| | Getting extra funds for the school | 19.00 |

Table 5.33 : Percentage of Head Teachers Reporting Main Responsibility for Different School Activities

| District | School Activities | Total |
|----------|--|-------|
| SGJ | Drawing up time table for classes | 93.00 |
| | Assigning teachers to different classes | 74.40 |
| | Deciding on expenditure on instructional aids | 53.50 |
| | Appointing teachers to the school | 00.00 |
| | Dismissing/transferring teachers from the school | 02.30 |
| | Evaluating teachers' performance | 58.10 |
| | Establishing standards for students promotion | 93.00 |
| | Establishing Homework Policies | 97.70 |
| | Adapting syllabus to local conditions | 72.10 |
| | Getting extra funds for the school | 30.20 |
| SDL | Drawing up time table for classes | 95.50 |
| | Assigning teachers to different classes | 79.50 |
| | Deciding on expenditure on instructional aids | 38.60 |
| | Appointing teachers to the school | 02.30 |
| | Dismissing/transferring teachers from the school | 00.00 |
| | Evaluating teachers' performance | 79.50 |
| | Establishing standards for students promotion | 93.20 |
| | Establishing Homework Policies | 86.40 |
| | Adapting syllabus to local conditions | 65.90 |
| | Getting extra funds for the school | 25.00 |

Establishing homework policy and standard for students' promotion was perceived by more than 85 per cent head teachers. In Rajnandgaon, 100 per cent head teachers have perceived this as a part of their duties. This has implications for getting the head teachers trained through inservice mode in these areas.

SANCTIONING AUTHORITY

A very small percentage of the head teachers observed that they had an authority to spend money on behalf of the school. The data relating to authority to sanction expenditure is presented in Table 5.34. The percentage of head teachers varied from a low of 2.4 in Bilaspur and Rajnandgaon to a high of 18.6 in Sarguja.

Table 5.34: Authority to Sanction Expenditure

| Description | BPR | RGH | RNG | SGJ | SDL |
|---|-------|-------|-------|-------|-------|
| Head Teacher to spend on behalf of school | 02.40 | 13 50 | 02 40 | 18 60 | 06.80 |

The basic question is why only a few head teachers had this observation. The rules regarding these aspects should be made clear to all head teachers.

Head teachers should be given power to sanction expenditure for the school

DAYS FOR NON SCHOOL ACTIVITY

The services of the head teachers were utilised for a large number of non-teaching activities by the officials. The head teachers reported that 4 to 11 days were utilised for other activities. The distribution of days spent in a month on different activities are presented in Table 5.35.

Table 5.35: Head Teachers' Time Spent on Non-school Activity

| Activity | BPR | RGH | RNG | SGJ | SDL |
|--------------------------|-------|-------|-------|-------|-------|
| General Administration | 04.26 | 02.35 | 03.28 | 06.84 | 02.07 |
| Block Level Meeting | 00.73 | 00.37 | 01.00 | 00.93 | 00.45 |
| Public Function | 00.18 | 00.05 | 00.09 | 00.02 | 00.00 |
| Other Activities | 00.40 | 01.13 | 01.33 | 00.95 | 01.23 |
| Average Total days spent | 07.50 | 03.86 | 06.21 | 10.80 | 04 25 |

If possible, the head teachers need not be involved in matters not related with education by the officials of the State Department.

CHAPTER 6

THE DROPOUTS

The data presented in this chapter is of the school dropouts. It includes data relating to age, detention, reason for discontinuance of studies, educational aspirations, earning for living, nutritional and health status, educational level of parents, etc. The achievement of dropouts in literacy and numerary is also analysed, interpreted and reported here.

Four Hundred eighty-four dropout students were interviewed by the field team. More girl dropouts (272) were covered than boy dropouts (212). The percentages of boys and girls were 43.80 and 56.20, respectively. This shows that more girls than boys are dropouts. A difficulty was felt in locating the dropout students. The school records for the addresses of the dropouts were not properly maintained. The address given in the school register was changed as the family moved from one place to another.

DISTRIBUTION OF DROPOUTS

The dropout is a child who leaves school without completing the studies up to Class V. With the implementation of the policy of non-detention, a child is not detained in any class up to Class IV in the primary school. The names of such children who did not attend school regularly were kept in the register. After a prescribed period these names were struck off from the school attendance register. The school records - enrolment register, class attendance register - were thoroughly screened by the field team to locate the addresses of dropout students.

Dropouts - Genderwise

The percentage of distribution of dropout students is given in Table 6.1, according to gender. The percentage of dropout boys varied from 29.6 in Bilaspur to 53.2 in Sarguja. The percentage of dropout girls varied from 46.8 in Sarguja to 70.4 in Bilaspur. In the three districts - Bilaspur, Raigarh and Rajnandgaon the percentage of dropout girls was more than 57.

Table 6.1: Percentage Distribution of Dropouts (Genderwise)

| District | Boys | Girls |
|----------|-------|-------|
| BPR | 29.60 | 70.40 |
| RGH | 42.40 | 57.60 |
| RNG | 43.00 | 57.00 |
| SGJ | 53.20 | 46.80 |
| SDI | 50.60 | 49.40 |

Table 6.2 presents the percentage distribution of dropout students according to location. The percentage of dropout students from rural areas varied from 84.8 in Raigarh to 94.9 in Bilaspur. Similarly, the percentage of dropout students from urban area varied from 85.1 in Bilaspur to 15.2 in Raigarh. No dropout case was traceable from the urban area of Shahdol. A look at the Table reveals that more students from the rural area drop out than students from the urban area.

Table 6.2: Percentage Distribution of Dropouts (Locationwise)

| District | Rural | Urban |
|----------|--------|-------|
| BPR | 94.90 | 05.10 |
| RGH | 84.80 | 15.20 |
| RNG | 90.60 | 09.40 |
| SGJ | 85.30 | 14.70 |
| SDL | 100.00 | 00.00 |

Dropout - Castewise

The percentage distribution of dropout students according to caste is presented in Table 6.3. More ST dropout students were from Raigarh (48.5%), Sarguja (48.6%) and Shahdol (59%). More OBC dropout students were from Bilaspur (49%) and Rajnandgaon (77%). A very small percentage of students (on an average less than 10) of Other castes became dropouts. From Bilaspur, 32 per cent SC were in the category of dropouts.

Table 6.3: Percentage Distribution of Dropouts (Castewise)

| District | SC | ST | OBC | Others |
|----------|-------|-------|-------|--------|
| BPR | 32.70 | 16.30 | 49.00 | 02.00 |
| RGH | 12.10 | 48.50 | 39.40 | 00.00 |
| RNG | 06.30 | 14.80 | 77.30 | 01.60 |
| SGJ | 12.80 | 48.60 | 26.60 | 11.90 |
| SDL | 08.40 | 59.00 | 27.70 | 04.80 |

From the above discussion, it may be concluded that.

- 1 More girls were school dropouts than boys.
- 2 More students from rural areas were dropouts than students from urban areas
- 3 In comparison to SC, more ST students were dropouts

The lowest percentage of dropouts of Other castes were from Bilaspur and Rajnandgaon.

AGE

The percentage distribution of dropouts according to age is presented in Table 6.4. The data of dropouts were classified into three categories according to age - less than 10 years, 10 to 12 years, over 12 years. A look at the Table reveals that about ten per cent students had left the school when they were under 10 years of age in all the districts.

Table 6.4: Percentage Distribution of Dropouts According to Age

| Age | BPR | RGH | RNG | SGJ | SDL |
|----------------|-------|-------|-------|-------|-------|
| Under 10 years | 12.30 | 13.60 | 06.30 | 13.80 | 09.60 |
| 10 -12 years | 51.00 | 51.50 | 57.10 | 69.70 | 67.50 |
| Over 12 years | 36.70 | 34.90 | 36.60 | 16.50 | 22.90 |

More than 50 per cent students left the school from the age-group of ten to twelve years. The highest percentage of dropout students in this age range was from Sarguja (69.7).

About one-third dropout students were in the age-group of more than 12 years from the districts of Bilaspur, Raigarh and Rajnandgaon. The percentage of dropout students from Sarguja and Shahdol was 16.5 and 22.9 respectively for this age range. The sample of dropouts indicated that these children were of over-age for Class V. It is possible that they might have stopped coming to school earlier but their names were retained in the register.

DETENTION

The data about detention of dropouts in a class is shown in Table 6.5. Half of the total sample of dropouts from Bilaspur, Rajnandgaon, Sarguja and Shahdol were never detained in any class

Table 6.5: Position of Detention of Dropouts

| Description | BPR | RGH | RNG | SGJ | SDL |
|-----------------|-------|-------|-------|-------|-------|
| Never detained | 50.00 | 42.42 | 50.78 | 52.29 | 51.81 |
| Detained Once | 46.93 | 51.51 | 42.18 | 41.28 | 43.37 |
| Detained Twice | 03.07 | 06.06 | 06.25 | 04.58 | 04.82 |
| Detained Thrice | 00.00 | 00.00 | 00.78 | 01.85 | 00.00 |

In Raigarh 50 per cent dropouts were detained once in the school. In all other districts, more than 40 per cent students failed once.

About five per cent dropouts were detained twice. In Rajnandgaon and Sarguja there were cases of detention even thrice.

In order to know the position further the data was analysed according to class and gender. Table 6.6 shows the percentage of classwise repetitions according to gender.

The highest percentage of students left the school in Class III from the districts of Bilaspur, Rajnandgaon, Sarguja and Shahdol. In Raigarh, 62 per cent students left school in Class IV.

Table 6.7 reveals that more boys than girls repeated a class twice and finally left the school. More girls than boys repeated a class once. The policy of non-detention is not followed strictly. Table 6.7 indicates the real implementation of the policy.

Table 6.6: Percentage of Dropouts Repetitions According to Class (Genderwise)

| District | Class | Boys | Girls | Total |
|----------|-------|-------|-------|-------|
| BPR | I | 03.40 | 08.70 | 07.10 |
| | II | 10.30 | 05.80 | 07.10 |
| | III | 27.60 | 20.30 | 22.40 |
| | IV | 20.70 | 07.20 | 11.20 |
| | V | 03.40 | 00.00 | 01.00 |
| RGH | I | 14.30 | 15.80 | 15.20 |
| | II | 14.30 | 26.30 | 21.20 |
| | III | 21.40 | 21.10 | 21.20 |
| | IV | 57.10 | 65.80 | 62.10 |
| | V | 03.60 | 00.00 | 01.50 |
| RNG | I | 07.30 | 02.70 | 04.70 |
| | II | 07.30 | 08.20 | 07.80 |
| | III | 20.00 | 19.20 | 19.50 |
| | VI | 14.50 | 09.60 | 11.70 |
| | V | 03.60 | 02.70 | 03.10 |
| SGJ | I | 01.70 | 03.90 | 02.80 |
| | II | 05.20 | 05.90 | 05.50 |
| | III | 10.30 | 27.50 | 18.50 |
| | IV | 19.00 | 13.70 | 16.50 |
| | V | 03.40 | 02.00 | 02.80 |
| SDL | I | 02.40 | 04.90 | 03.60 |
| | II | 11.90 | 12.20 | 12.00 |
| | III | 14.30 | 14.60 | 14.50 |
| | IV | 19.00 | 07.30 | 13.30 |
| | V | 00.00 | 09.80 | 04.80 |

Table 6.7: Percentage Distribution of Dropouts According to Class Repetition

| District | Class | Boys | | | Girls | | | Total | | |
|----------|-------|-------|-------|--------|-------|-------|--------|-------|-------|--------|
| | | Once | Twice | Thrice | Once | Twice | Thrice | Once | Twice | Thrice |
| BPR | I | 03.40 | 00.00 | 00.00 | 08.70 | 00.00 | 00 00 | 07 10 | 00.00 | 00.00 |
| | II | 10.30 | 00.00 | 00 00 | 05.80 | 00 00 | 00.00 | 07.10 | 00 00 | 00.00 |
| | III | 24 10 | 03.40 | 00.00 | 18.80 | 01.40 | 00.00 | 20 40 | 02 00 | 00.00 |
| | IV | 20.70 | 00.00 | 00 00 | 07 20 | 00.00 | 00 00 | 11 20 | 00 00 | 00.00 |
| | V | 03.40 | 03.40 | 00.00 | 00.00 | 00.00 | 00.00 | 01 00 | 01.00 | 00 00 |
| RGH | I | 14 30 | 00 00 | 00.00 | 02 60 | 00.00 | 00.00 | 07.50 | 00.00 | 00 00 |
| | II | 10 70 | 03.60 | 00.00 | 13 20 | 02 60 | 00 00 | 12 10 | 03 00 | 00 00 |
| | III | 17 90 | 03.60 | 00.00 | 21.10 | 00 00 | 00.00 | 19 70 | 01 50 | 00 00 |
| | IV | 14.30 | 03.60 | 00.00 | 07.90 | 00.00 | 00 00 | 10.60 | 01.50 | 00 00 |
| | V | 00 00 | 00.00 | 00.00 | 00.00 | 00 00 | 00 00 | 00.00 | 00 00 | 00 00 |
| RNG | I | 07.30 | 00.00 | 00 00 | 02.70 | 0140 | 00 00 | 04 70 | 00 80 | 00 00 |
| | II | 07.30 | 00 00 | 00 00 | 08 20 | 01 40 | 00 00 | 07 80 | 00.80 | 00 00 |
| | III | 18 20 | 80.00 | 01.80 | 16.40 | 83 60 | 00 00 | 17.20 | 82 00 | 00 80 |
| | IV | 12.70 | 01.80 | 00.00 | 08.20 | 01 40 | 00.00 | 10.20 | 01.60 | 00 00 |
| | V | 01 80 | 01.80 | 00.00 | 02.70 | 00 00 | 00.00 | 02.30 | 00.80 | 00 00 |
| SGJ | I | 01 70 | 01.70 | 00.00 | 03.90 | 00.00 | 00.00 | 02.80 | 00.90 | 00.00 |
| | II | 05.20 | 00.00 | 00.00 | 05.90 | 00.00 | 00.00 | 05.50 | 00.00 | 00.00 |
| | III | 08.60 | 01.70 | 00 00 | 21.60 | 02.00 | 03.90 | 14.70 | 01.80 | 01 80 |
| | IV | 19.00 | 00.00 | 00.00 | 09 80 | 03.90 | 00.00 | 14.70 | 01.80 | 00 00 |
| | V | 08 40 | 00.00 | 00 00 | 02 00 | 00.00 | 00.00 | 02 80 | 00 00 | 00 00 |
| SDL | I | 02 40 | 00 00 | 00 00 | 04.90 | 00 00 | 00 00 | 03 60 | 00 00 | 00 00 |
| | II | 11 90 | 88 10 | 00.00 | 12 20 | 87.80 | 00 00 | 12 00 | 88 00 | 00 00 |
| | III | 11 90 | 02 40 | 00 00 | 14 60 | 00 00 | 00 00 | 13 30 | 01 20 | 00 00 |
| | IV | 16 70 | 00.00 | 00 00 | 07 30 | 00 00 | 00 00 | 12 00 | 00 00 | 00 00 |
| | V | 02 40 | 00 00 | 00 00 | 02 40 | 07 30 | 00 00 | 02 40 | 03 60 | 00 00 |

Table 6.8 shows the percentage of dropout students by class last enrolled. The data of dropout is distributed around 30 per cent in all the classes and all the districts

Table 6.8: Percentage Dropouts by Class Last Enrolled

| Class | BPR | RGH | RNG | SGJ | SDL |
|-----------|-------|-------|-------|-------|-------|
| Class III | 28.50 | 43.50 | 37.50 | 33.90 | 30.10 |
| Class IV | 43.90 | 33.90 | 32.00 | 35.80 | 34.90 |
| Class V | 27.60 | 22.60 | 30.50 | 30.30 | 34.90 |

From the above discussion, it may be concluded that:

1. Students opted to leave the school after failing in a class.
2. In many cases repetition of a class might have forced students to leave the school.
3. The policy about dropout is not implemented fully.
4. Class III is a crucial stage when most of the students drop out.

REASONS FOR DISCONTINUANCE OF STUDIES

The dropout students were asked to give reason for the absence from the school. The responses were tabulated and presented in Table 6.9.

More than 50 per cent respondents attributed their leaving the school to two reasons - parental wishes and assistance in household work. The third major reason for keeping away from the school was to earn a livelihood.

Boys attributed one more reason for their present status. In Raigarh and Shahdol, about 10 per cent dropouts reported that studies were difficult. In Bilaspur, Rajnandgaon and Sarguja more than 15 per cent dropouts assigned this reason.

Table 6.9: Reasons of Discontinuance of Studies by Dropouts (Genderwise)

| District | Reasons | Boys | Girls | Total |
|----------|---|-------|-------|-------|
| BPR | 1. Parents do not want | 13.80 | 21.70 | 19.40 |
| | 2. Have to assist in household | 34.50 | 37.70 | 36.70 |
| | 3. Will have to earn a living | 20.70 | 00.00 | 06 10 |
| | 4. Training in household enterprise | 03.40 | 01.40 | 02.00 |
| | 5. Studies too difficult/Not interested | 24.10 | 13.00 | 16.30 |
| | 6. Cannot afford textbooks/notebooks | 00.00 | 04.30 | 03 10 |
| | 7. Illness/Not keeping well | 00.00 | 07.20 | 05.10 |
| | 8. Will get married | 00.00 | 01.40 | 01.00 |
| | 9. Failure/Did not learn anything | 00.00 | 01.40 | 01.00 |
| | 10. Schools too far | 00.00 | 01.40 | 01.00 |
| | 11. Other | 03.40 | 10.10 | 08.20 |
| RGH | 1. Parents do not want | 14.30 | 10.50 | 12.10 |
| | 2. Have to assist in household | 35.70 | 36.80 | 36.40 |
| | 3. Will have to earn a living | 17.90 | 05.30 | 10.60 |
| | 4. Training in household enterprise | 00.00 | 02.60 | 01.50 |
| | 5. Studies too difficult/Not interested | 10.70 | 23.70 | 18.20 |
| | 6. Cannot afford textbooks/notebooks | 03.60 | 00.00 | 01.50 |
| | 7. Illness/Not keeping well | 03.60 | 10.50 | 07.60 |
| | 8. Will get married | 00.00 | 00.00 | 00.00 |
| | 9. Failure/Did not learn anything | 00.00 | 00.00 | 00.00 |
| | 10. Schools too far | 00.10 | 02.60 | 01.50 |
| | 11. Other | 14.30 | 07.90 | 10.60 |

(Contd. on the next page)

Table 6.9: Reasons of Discontinuance of Studies by Dropouts (Genderwise)

| District | Reasons | Boys | Girls | Total |
|----------|---|-------|-------|-------|
| RNG | 1 Parents do not want | 12.70 | 20.50 | 17.20 |
| | 2 Have to assist in household | 32.70 | 31.50 | 32.00 |
| | 3 Will have to earn a living | 10.90 | 06.80 | 08.60 |
| | 4 Training in household enterprise | 00.00 | 02.70 | 01.60 |
| | 5 Studies too difficult/Not interested | 18.20 | 21.90 | 20.30 |
| | 6. Cannot afford textbooks/notebooks | 07.30 | 02.70 | 04.70 |
| | 7 Illness/Not keeping well | 07.30 | 05.50 | 06.30 |
| | 8. Will get married | 00.00 | 00.00 | 00.00 |
| | 9. Failure/Did not learn anything | 00.00 | 00.00 | 00.00 |
| | 10. Schools too far | 00.00 | 00.00 | 00.00 |
| | 11. Other | 10.90 | 08.20 | 09.40 |
| SGJ | 1 Parents do not want | 15.50 | 27.50 | 21.10 |
| | 2 Have to assist in household | 34.50 | 39.20 | 36.70 |
| | 3. Will have to earn a living | 05.20 | 03.90 | 04.60 |
| | 4. Training in household enterprise | 00.00 | 00.00 | 00.00 |
| | 5. Studies too difficult/Not interested | 15.50 | 09.80 | 12.80 |
| | 6. Cannot afford textbooks/notebooks | 03.40 | 00.00 | 01.80 |
| | 7. Illness/Not keeping well | 13.80 | 03.90 | 09.20 |
| | 8 Will get married | 03.40 | 00.00 | 01.80 |
| | 9. Failure/Did not learn anything | 00.00 | 05.90 | 02.80 |
| | 10. Schools too far | 00.00 | 03.90 | 02.80 |
| | 11. Other | 08.60 | 05.90 | 07.30 |

(Contd. on the next page)

Table 6.9: Reasons of Discontinuance of Studies by Dropouts (Genderwise)

| District | Reasons | Boys | Girls | Total |
|----------|---|-------|-------|-------|
| SDL | 1. Parents do not want | 07.10 | 12.20 | 09.60 |
| | 2. Have to assist in household | 42.90 | 31.70 | 37.30 |
| | 3. Will have to earn a living | 14.30 | 07.30 | 10.80 |
| | 4. Training in household enterprise | 00.00 | 02.40 | 01.20 |
| | 5. Studies too difficult/Not interested | 09.50 | 14.60 | 12.00 |
| | 6. Can/not afford textbooks/notebooks | 02.40 | 00.00 | 01.20 |
| | 7. Illness/Not keeping well | 11.90 | 09.80 | 10.80 |
| | 8. Will get married | 00.00 | 00.00 | 00.00 |
| | 9. Failure/Did not learn anything | 02.40 | 02.40 | 02.40 |
| | 10. Schools too far | 00.00 | 02.40 | 01.20 |
| | 11. Other | 09.50 | 17.10 | 13.30 |

The responses of reasons of dropping out from schools were also analysed according to location of the schools. The data is presented in Table 6.10.

Table 6.10: Reasons of Discontinuance of Studies by Dropouts (Locationwise)

| District | Reasons | Rural | Urban |
|----------|---|-------|-------|
| BPR | 1. Parents do not want | 20.40 | 00.00 |
| | 2. Have to assist in household | 37.60 | 20.00 |
| | 3. Will have to earn a living | 05.40 | 20.00 |
| | 4. Training in household enterprise | 02.20 | 00.00 |
| | 5. Studies too difficult/Not interested | 16.10 | 20.00 |
| | 6. Cannot afford textbooks/notebooks | 02.20 | 20.00 |
| | 7. Illness/Not keeping well | 04.30 | 20.00 |
| | 8. Will get married | 01.10 | 00.00 |
| | 9. Failure/Did not learn anything | 01.10 | 00.00 |
| | 10. Schools too far | 01.10 | 00.00 |
| | 11. Other | 08.60 | 00.00 |
| RGH | 1. Parents do not want | 14.30 | 00.00 |
| | 2. Have to assist in household | 39.30 | 20.00 |
| | 3. Will have to earn a living | 10.70 | 10.00 |
| | 4. Training in household enterprise | 01.80 | 00.00 |
| | 5. Studies too difficult/Not interested | 17.90 | 20.00 |
| | 6. Cannot afford textbooks/notebooks | 00.00 | 10.00 |
| | 7. Illness/Not keeping well | 05.40 | 20.00 |
| | 8. Will get married | 00.00 | 00.00 |
| | 9. Failure/Did not learn anything | 00.00 | 00.00 |
| | 10. Schools too far | 01.80 | 00.00 |
| | 11. Other | 08.90 | 20.00 |

(Contd on the next page)

Table 6.10: Reasons of Discontinuance of Studies by Dropouts (Locationwise)

| District | Reasons | Rural | Urban |
|----------|---|-------|-------|
| RNG | 1. Parents do not want | 15.50 | 33.30 |
| | 2. Have to assist in household | 32.80 | 25.00 |
| | 3. Will have to earn a living | 08.60 | 08.30 |
| | 4. Training in household enterprise | 01.70 | 00.00 |
| | 5. Studies too difficult/Not interested | 20.70 | 16.70 |
| | 6. Cannot afford textbooks/notebooks | 05.20 | 00.00 |
| | 7. Illness/Not keeping well | 06.00 | 08.30 |
| | 8. Will get married | 00.00 | 00.00 |
| | 9. Failure/Did not learn anything | 00.00 | 00.00 |
| | 10. Schools too far | 00.00 | 00.00 |
| | 11. Other | 09.50 | 08.30 |
| SGJ | 1. Parents do not want | 23.70 | 06.30 |
| | 2. Have to assist in household | 38.70 | 25.00 |
| | 3. Will have to earn a living | 04.30 | 06.30 |
| | 4. Training in household enterprise | 00.00 | 00.00 |
| | 5. Studies too difficult/Not interested | 08.60 | 37.50 |
| | 6. Cannot afford textbooks/notebooks | 02.20 | 00.00 |
| | 7. Illness/Not keeping well | 09.70 | 06.30 |
| | 8. Will get married | 01.10 | 06.30 |
| | 9. Failure/Did not learn anything | 01.10 | 12.50 |
| | 10. Schools too far | 02.20 | 00.00 |
| | 11. Other | 08.60 | 00.00 |

(Contd. on the next page)

Table 6.10: Reasons of Discontinuance of Studies by Dropouts (Locationwise)

| District | Reasons | Rural | Urban |
|----------|--|-------|-------|
| SDL | 1 Parents do not want | 09.60 | 00.00 |
| | 2 Have to assist in household | 37.30 | 00 00 |
| | 3. Will have to earn a living | 10.80 | 00.00 |
| | 4. Training in household enterprise | 01.20 | 00.00 |
| | 5 Studies too difficult/Not interested | 12 00 | 00 00 |
| | 6 Cannot afford textbooks/notebooks | 01.20 | 00.00 |
| | 7 Illness/Not keeping well | 10.80 | 00.00 |
| | 8. Will get married | 00.00 | 00.00 |
| | 9. Failure/Did not learn anything | 02.40 | 00.00 |
| | 10. Schools too far | 01.20 | 00.00 |
| | 11. Other | 13.30 | 00.00 |

The major reason of discontinuance of the study by the respondents from rural areas was assisting the parents in household work. Parents of respondents from rural areas did not want their ward to study in the school. That is why they left the school. But it is possible that the progress of these students in the school was not satisfactory. So the parents decided to ask these respondents not to go to school.

A very small percentage of dropouts from Bilaspur and Sarguja reported the reason of getting married. This indicated that child marriage prevailed in these families.

From the above discussion, it may be concluded that:

1. The phenomenon of dropout is a complex one. The contributing factors are many. These are related to socio-economic status, social situation and ability of children
- 2 The major reasons of dropouts are: (a) parents do not want that the child should study further, (b) the child has to assist in the household work, (c) the child is expected to earn for livelihood.

EDUCATIONAL ASPIRATIONS

The respondents left the school but many of them cherished a dream to study further. The data about educational aspirations of dropouts is presented in Table 6.11.

More than one-third dropouts did not want to study further. The percentage of dropout girls who did not want to study further is higher than the dropout boys.

About one third dropouts from the four districts - Raigarh, Rajnandgaon, Sarguja and Shahdol wanted to complete primary/middle level education. In Bilaspur 15 per cent dropouts were interested in studying in primary/middle schools. More dropout girls than dropout boys were interested in completing elementary education from the districts of Bilaspur, Raigarh and Rajnandgaon.

Surprisingly, dropouts from Bilaspur (20%) were interested in completing graduation/postgraduation. In all other districts less than 10 per cent dropouts fell in this category

From the above discussion, it may be concluded that:

1. About two-thirds of dropouts aspired to study further
- 2 Efforts should be made to provide/create opportunities for these dropouts to facilitate further study

Table 6.11: Educational Aspirations of Dropouts (Locationwise)

| District | Level | Boys | Girls | Total |
|----------|------------------------|-------|-------|-------|
| BPR | 1. Don't want to study | 34.50 | 52.20 | 46.90 |
| | 2 Primary/Middle | 06.80 | 18.90 | 15.30 |
| | 3. Secondary | 06.90 | 13.00 | 11.20 |
| | 4. Senior Secondary | 13.80 | 02.90 | 06.10 |
| | 5 Graduation | 37 90 | 13 00 | 20 40 |
| RGH | 1 Don't want to study | 28.60 | 52.60 | 42.40 |
| | 2 Primary/Middle | 28.50 | 39.50 | 34.80 |
| | 3 Secondary | 17.90 | 00.00 | 07.60 |
| | 4 Senior Secondary | 07.10 | 05.30 | 06.10 |
| | 5. Graduation | 17.90 | 20.00 | 09.10 |
| RNG | 1. Don't want to study | 40.00 | 45.20 | 42.90 |
| | 2. Primary/Middle | 27.20 | 42.50 | 35.90 |
| | 3. Secondary | 14 50 | 06.80 | 10.20 |
| | 4 Senior Secondary | 09 10 | 05 50 | 07.00 |
| | 5 Graduation | 09 10 | 00.00 | 03.90 |
| SGJ | 1. Don't want to study | 25.90 | 37.20 | 31.20 |
| | 2. Primary/Middle | 44.80 | 37.20 | 41.30 |
| | 3. Secondary | 13.80 | 11.80 | 12.80 |
| | 4 Senior Secondary | 08.60 | 07.80 | 08.30 |
| | 5. Graduation | 06 80 | 05.90 | 06.40 |
| SDL | 1 Don't want to study | 38.10 | 29 20 | 33.70 |
| | 2 Primary/Middle | 28.60 | 39.00 | 33.80 |
| | 3. Secondary | 19.00 | 14 60 | 16.90 |
| | 4 Senior Secondary | 07 10 | 12 20 | 09 60 |
| | 5 Graduation | 07 20 | 04 90 | 06.00 |

EARNING FOR LIVING

The percentage of dropouts doing paid work is reported in Table 6.12. Less than nine per cent dropouts from the districts left school for earning. About 23 per cent dropouts were engaged in paid work in Rajnandgaon. The percentage of boys engaged in paid work varied from 4.8 in Shahdol to 34.5 in Rajnandgaon. The percentage of girls ranged from a low of 2.9 in Bilaspur to a high of 13.7 in Rajnandgaon. In the district of Rajnandgaon, the largest number of dropouts worked for earning.

Table 6.12: Percentage of Dropouts Doing Paid Work

| District | Percentage of Dropouts | | |
|----------|------------------------|-------|-------|
| | Boys | Girls | Total |
| BPR | 24.10 | 02.90 | 09.20 |
| RGH | 25.00 | 13.20 | 18.20 |
| RNG | 34.50 | 13.70 | 22.70 |
| SGJ | 06.90 | 07.80 | 07.30 |
| SDL | 04.80 | 07.30 | 06.00 |

The percentage of dropouts engaged in different occupations is given in Table 6.13. The agriculture sector employed maximum dropouts. In Bilaspur, more boys than girls are engaged in agricultural work. In all other districts, more girls than boys were engaged in agricultural work.

Table 6.13: Percentage of Dropouts Engaged in Different Occupations

| District | Occupation | Boys | Girls | Total |
|----------|---|-------|-------|-------|
| BPR | 1. Factory work | 00.00 | 00.00 | 00.00 |
| | 2. Household Industry/artisan work | 10.00 | 00.00 | 04.80 |
| | 3. Agricultural work | 30.00 | 18.20 | 23.80 |
| | 4. Services (Domestic/shop/hotels etc.) | 10.00 | 00.00 | 04.80 |
| | 5. Others | 50.00 | 81.80 | 66.70 |
| RGH | 1. Factory work | 09.00 | 00.00 | 04.20 |
| | 2. Household Industry/artisan work | 30.00 | 07.70 | 04.20 |
| | 3. Agricultural work | 36.40 | 38.50 | 37.50 |
| | 4. Services (Domestic/shop/hotels etc.) | 18.20 | 23.10 | 20.80 |
| | 5. Others | 36.40 | 30.80 | 33.30 |
| RNG | 1. Factory work | 00.00 | 00.00 | 00.00 |
| | 2. Household Industry/artisan work | 03.20 | 04.50 | 03.80 |
| | 3. Agricultural work | 48.40 | 63.60 | 54.70 |
| | 4. Services (Domestic/shop/hotels etc.) | 16.10 | 13.60 | 15.10 |
| | 5. Others | 32.30 | 18.20 | 26.40 |
| SGJ | 1. Factory work | 00.00 | 00.00 | 00.0 |
| | 2. Household Industry/artisan work | 07.10 | 00.00 | 04.50 |
| | 3. Agricultural work | 57.10 | 50.00 | 54.50 |
| | 4. Services (Domestic/shop/hotels etc.) | 21.40 | 12.50 | 18.20 |
| | 5. Others | 14.30 | 37.50 | 22.70 |
| SDL | 1. Factory work | 00.00 | 00.00 | 00.00 |
| | 2. Household Industry/artisan work | 00.00 | 11.10 | 04.00 |
| | 3. Agricultural work | 37.50 | 55.60 | 44.00 |
| | 4. Services (Domestic/shop/hotels etc.) | 06.30 | 11.10 | 08.00 |
| | 5. Others | 56.30 | 22.20 | 44.00 |

NUTRITIONAL STATUS

The dropouts were asked to report on the frequency of meals taken. Table 6.14 shows the distribution of dropouts in three categories.

Table 6.14: Nutritional Status of Dropouts (in per cent)

| District | Time | Percentage of Dropouts who had meals | | |
|----------|-----------|--------------------------------------|-----------|-------|
| | | Always | Sometimes | Never |
| BPR | Morning | 90.80 | 05.10 | 04.10 |
| | Afternoon | 94.90 | 04.10 | 01.00 |
| | Evening | 95.90 | 04.10 | 00.00 |
| RGH | Morning | 78.80 | 18.20 | 03.00 |
| | Afternoon | 93.90 | 06.10 | 00.00 |
| | Evening | 97.00 | 03.00 | 00.00 |
| RNG | Morning | 89.10 | 08.60 | 02.30 |
| | Afternoon | 84.10 | 12.50 | 03.10 |
| | Evening | 95.30 | 03.10 | 00.00 |
| SGJ | Morning | 78.90 | 18.30 | 01.80 |
| | Afternoon | 74.30 | 17.40 | 07.30 |
| | Evening | 74.50 | 18.30 | 07.30 |
| SDL | Morning | 94.30 | 06.00 | 09.60 |
| | Afternoon | 85.50 | 13.30 | 01.20 |
| | Evening | 95.20 | 04.80 | 00.00 |

In Bilaspur more than 90 per cent dropouts always had their meals in morning, afternoon and evening. In Raigarh more than 90 per cent dropouts reported for afternoon and evening meals regularly.

In Shahdol about 10 per cent dropouts had never morning meal. Similarly from Bilaspur, Raigarh and Rajnandgaon about three per cent dropouts never had morning meal. This reflects upon the economic status of the families of these dropouts.

HEALTH STATUS

The health status of dropouts is reported in Tables 6.15 and 6.16

Table 6.15: Health Status of Dropouts -Impairment(in per cent)

| Impairment | BPR | RGH | RNG | SGJ | SDL |
|------------|-------|-------|-------|-------|-------|
| Vision | 00.00 | 01.50 | 00.00 | 03.70 | 01.20 |
| Hearing | 01.00 | 00.00 | 00.80 | 03.70 | 04.80 |
| Speech | 02.00 | 03.00 | 01.60 | 01.80 | 01.20 |
| Limbs | 03.10 | 00.00 | 00.80 | 02.80 | 00.00 |

The impairment for vision, hearing, speech and limbs varied from one to three per cent for each category.

In Sarguja, 3.7 per cent dropouts were having vision and hearing impairment each. In Shahdol 4.8 per cent (highest) dropouts suffered from hearing impairment.

Table 6.16: Health Status of Dropouts - Illness(in per cent)

| Illness | BPR | RGH | RNG | SGJ | SDL |
|-------------------------------|-------|-------|-------|-------|-------|
| Fever | 03.10 | 06.10 | 01.60 | 01.80 | 03.60 |
| Asthma/ Respiration | 02.00 | 07.60 | 01.60 | 01.80 | 01.20 |
| Diarrhoea/ Gastroenteritis | 00.00 | 00.00 | 00.00 | 02.80 | 02.40 |
| Skin disorder | 01.00 | 06.10 | 03.10 | 01.80 | 12.00 |

Fever is the most common illness in all the districts. The percentage of dropouts who suffered from fever varied from a low of 1.6 in Rajnandgaon to a high of 6.1 in Raigarh. The illness related with respiration/asthma was frequent among dropouts of Raigarh. About eight per cent dropouts suffered from it.

EDUCATIONAL LEVEL OF PARENTS

Table 6.17 presents the educational level of parents of dropouts. Mothers of most of the dropouts were illiterate. The percentage of illiterate mothers varied from a low of 82.6 in Bilaspur to a high of 91.7 in Sarguja. The fathers of dropouts were also illiterate in many cases. The percentage of illiterate fathers ranged from a low of 39.8 in Bilaspur to a high of 54.6 in Raigarh. It was possible that academic support was not available to dropouts in families where both the parents were illiterate.

Table 6.17: Educational Status of Parent of Dropouts(in percent)

| Educational Level | BPR | | RGH | | RNG | | SGJ | | SDL | |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Father | Mother | Father | Mother | Father | Mother | Father | Mother | Father | Mother |
| Illiterate | 39.80 | 82.60 | 54.60 | 90.90 | 49.20 | 91.40 | 54.10 | 91.70 | 42.20 | 88.00 |
| Literate | 04.10 | 00.00 | 10.60 | 01.50 | 03.90 | 00.80 | 09.20 | 02.80 | 03.60 | 01.20 |
| Primary | 24.50 | 09.20 | 24.20 | 01.50 | 28.10 | 04.70 | 22.90 | 02.80 | 27.70 | 02.40 |
| Secondary | 21.40 | 03.10 | 03.00 | 00.00 | 10.90 | 00.80 | 10.10 | 00.90 | 12.00 | 01.20 |
| Hr Secondary | 02.00 | 00.00 | 00.00 | 00.00 | 00.80 | 00.00 | 00.90 | 00.00 | 04.80 | 01.20 |
| College | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |

A very small percentage of parents were literate with no formal qualification. They could just read and write.

More than 20 per cent fathers of dropouts possessed primary level education. The mothers of dropouts having primary education was less than four per cent.

From the above discussion, it may be concluded that most of the parents of dropouts were illiterate.

OCCUPATIONAL LEVEL OF PARENTS

The occupational levels of fathers and mothers are shown in Tables 6.18 and 6.19

Table 6.18: Occupational Status of Parents of Dropouts(in per cent)

| Occupation | BPR | | RGH | | RNG | | SGJ | | SDL | |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Father | Mother | Father | Mother | Father | Mother | Father | Mother | Father | Mother |
| Agricultural Work | 62.30 | 29.50 | 65.20 | 18.10 | 70.30 | 53.10 | 71.50 | 13.70 | 61.50 | 09.60 |
| Non-Agricultural Work | 37.70 | 70.50 | 34.80 | 81.90 | 29.70 | 46.90 | 28.50 | 86.30 | 38.50 | 90.40 |

Table 6.19: Occupational Status of Mothers of Dropouts

| Occupation | BPR | RGH | RNG | SGJ | SDL |
|-----------------------|-------|-------|-------|-------|-------|
| Household work | 55.10 | 60.60 | 40.60 | 75.20 | 66.30 |
| Agricultural work | 07.40 | 04.50 | 14.80 | 13.70 | 09.60 |
| Non-Agricultural work | 37.50 | 34.90 | 44.60 | 11.10 | 24.10 |

It is evident from Table 6.18 that more than 60 per cent fathers were engaged in agricultural work. About one-third fathers of dropouts worked in non-agricultural area. Most of the mothers of dropouts were engaged in household work. About one-third mothers of dropouts were engaged in agricultural work. The dropouts were not very clear about the occupation of their mothers.

HEAD OF THE FAMILY

The data related with the head of the family of dropouts is given in Table 6.20. It is clearly revealed that father was the head of the family in almost all the case. The percentage of father as head of the family varied from a low of 87.8 in Bilaspur to a high of 96.3 in Sarguja. The mother was the head of the family in less than eight per cent cases.

Table 6.20: Head of the Family of Dropouts

| Head | BPR | RGH | RNG | SGJ | SDL |
|--------|-------|-------|-------|-------|-------|
| Father | 87.80 | 90.90 | 89.10 | 96.30 | 91.60 |
| Mother | 04.10 | 07.60 | 04.70 | 00.90 | 03.60 |

ACHIEVEMENT IN LITERACY

The mean achievement of dropout students is presented in Table 6.21. The mean achievement in literacy varied from 0.4 in Sarguja to 2.10 in Rajnandgaon. The literacy test contained eight questions. Each question was of one mark. The data presented in the Table revealed that most of the dropouts were not able to achieve even two marks. This shows that on an average they were not able to respond two questions correctly.

Table 6.21: Mean Achievement of Dropouts in Literacy (Genderwise)

| Districts | Boys | | Girls | | Total | | Significance |
|-----------|-------|-------|-------|-------|-------|-------|--------------|
| | Mean | S.D | Mean | S.D | Mean | S.D | |
| BPR | 01.82 | 01.19 | 01.61 | 01.07 | 01.67 | 01.11 | No |
| RGH | 01.89 | 01.19 | 01.95 | 01.29 | 01.92 | 01.24 | No |
| RNG | 02.09 | 01.28 | 02.11 | 01.32 | 02.10 | 01.29 | No |
| SGJ | 00.37 | 00.81 | 00.87 | 01.06 | 00.42 | 00.93 | No |
| SDL | 00.78 | 01.49 | 00.29 | 00.87 | 00.54 | 01.24 | No |

Achievement in literacy - Genderwise

Genderwise achievement of dropout students in literacy is also given in Table. On comparing boys and girls in all the five districts, it was found that the difference is not statistically significant though small variations in achievement were there. In Bilaspur and Shahdol boys achieved slightly higher than girls while in Raigarh, Rajnandgaon and Sarguja dropout girls achieved higher than dropout boys in literacy.

Achievement in Literacy - Locationwise

Locationwise means of achievement of dropout students in literacy is shown in Table 6.22. The achievement of dropout students from urban areas was higher in Raigarh, Rajnandgaon and Sarguja. In Bilaspur achievement of dropout students from rural areas was higher than dropout students from urban areas. Surprisingly, no dropout was available in the urban area of Shahdol. On comparing the achievement of dropout students from rural and urban areas it was observed that the difference is statistically significant in the districts of Rajnandgaon and Sarguja. The achievement of urban dropout students was higher than dropout students from the rural area.

Table 6.22: Mean Achievement of Dropouts in Literacy (Locationwise)

| Districts | Rural | | Urban | | Significance |
|-----------|-------|-------|-------|-------|--------------|
| | Mean | S.D | Mean | S.D | |
| BPR | 01.71 | 01.11 | 01.00 | 01.00 | No |
| RGH | 01.83 | 01.23 | 02.40 | 01.26 | No |
| RNG | 02.02 | 01.27 | 02.91 | 01.31 | Yes |
| SGJ | 00.26 | 00.78 | 01.31 | 01.25 | Yes |
| SDL | 00.54 | 01.24 | 00.00 | 00.00 | * |

*No urban cases were reported

Achievement in Literacy - Castewise

Castewise mean of achievement of dropout students in literacy is given in Table 6.23. A look at the Table reveals that though the scheduled caste students are available in the schools of Shahdol no dropout students from scheduled castes was available in Shahdol district. The mean achievement of Others varied from 0.46 in Sarguja to 3 in Rajnandgaon. This shows that the mean achievement of all the students were less than 3 out of a score of 8.

Table 6.23: Mean Achievement of Dropouts in Literacy (Castewise)

| Districts | SC | | ST | | OBC | | Others | |
|-----------|-------|-------|-------|-------|-------|-------|--------|-------|
| | Mean | S.D | Mean | S.D | Mean | S.D | Mean | S D |
| BPR | 01.56 | 01.04 | 02.00 | 01.32 | 01.66 | 01.07 | 01.00 | 01.41 |
| RGH | 02.00 | 01.30 | 01.68 | 01.17 | 02.19 | 01.29 | 00.00 | 00.00 |
| RNG | 01.87 | 01.64 | 02.31 | 01.29 | 01.27 | 01.27 | 03.00 | 01.41 |
| SGJ | 00.57 | 00.75 | 00.30 | 00.88 | 01.08 | 01.08 | 00.46 | 00.96 |
| SDL | 00.00 | 00.00 | 00.41 | 01.08 | 01.53 | 01.53 | 01.00 | 02.00 |

The mean achievement of dropout students was compared to find out differences in achievement. The results are presented in Table 6.24.

Table 6.24: Comparison of Dropouts in Achievement in Literacy (Castewise)

| Districts | SC & ST | SC & OBC | SC & Others | ST & OBC | ST & Others | OBC & Others |
|-----------|---------|----------|-------------|----------|-------------|--------------|
| BPR | No | No | Yes | No | No | No |
| RGH | No | No | Yes | No | Yes | Yes |
| RNG | No | No | No | No | No | No |
| SGJ | No | No | No | No | No | No |
| SDL | No | No | No | No | No | Yes |

The mean achievements of dropouts in literacy from the caste groups of SC, ST and OBC, taking two groups at a time, were not statistically significant.

The mean achievement of Others was higher and statistically significant in comparison to SC dropouts in the districts of Bilaspur and Raigarh. Similarly, the difference in achievement was significant between ST, OBC and Others in Raigarh.

From the above discussion, it may be concluded that the mean achievement of dropouts in literacy was exceptionally poor. In terms of percentage it was 26.

LEVELS OF ACHIEVEMENT IN LITERACY

The levels of achievement in literacy for dropouts were determined. There were five levels of achievements:

1. *Zero level:* The achievement of a dropout is zero in the test
2. *Not Achieving MLL (No MLL):* A level of achievement in which a student scores more than zero but less than 40 per cent is termed as 'Not Achieving MLL'
3. *Achieving MLL* A level of achievement in which a student scores 40 or more but less than 60 per cent is termed as 'Achieving MLL'
4. *Approaching Mastery:* A level of achievement in which a student scores 60 or more but less than eighty per cent is termed as 'Approaching Mastery'
5. *Achieving Mastery Level:* A level of achievement in which a student scores 80 per cent and above is termed as 'Achieving Mastery'

MLL stands for Minimum Level of Learning. It was expected from a student to achieve mastery level in the competencies designed for a class. The mastery level is defined as achieving proficiency in 80 per cent or more competencies. If a competency is assigned one mark then 80 competencies will have 80 marks out of a 100. In popular terms mastery level is achieved by a student if he scores 80 per cent or above.

Levels of Achievement - Genderwise

The percentage of dropouts on different levels of achievement in literacy according to gender are given in Table 6.25. More than 78 per cent dropouts from Shahdol and Sarguja were at zero level. About 40 per cent dropout students from Bilaspur, Raigarh and Rajnandgaon were at zero level and not achieving MLL level. In Sarguja and Shahdol a very small percentage of dropout students (below 10%) were at approaching mastery level and above. In Rajnandgaon about 36 per cent dropout students were in this category. In other two districts - Bilaspur and Raigarh - more than 20 per cent dropout students were at approaching mastery level and achieving mastery level.

Table 6.25: Percentage of Dropouts on Different Levels of Achievement in Literacy (Genderwise)

| Levels | BPR | | | RGH | | | RNG | | | SGJ | | | SDL | | |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Zero | 10.30 | 14.50 | 13.30 | 07.10 | 05.30 | 06.10 | 09.10 | 11.00 | 10.20 | 77.60 | 78.40 | 78.00 | 73.80 | 87.80 | 80.70 |
| No MLL | 34.50 | 34.80 | 34.70 | 39.30 | 44.70 | 42.40 | 30.90 | 24.70 | 27.30 | 10.30 | 09.80 | 10.10 | 07.10 | 02.40 | 04.80 |
| Achieving MLL | 31.00 | 31.90 | 31.60 | 25.00 | 23.70 | 24.20 | 20.00 | 30.10 | 25.80 | 10.30 | 02.00 | 06.40 | 00.00 | 04.90 | 02.40 |
| Approaching Mastery | 10.30 | 13.00 | 12.20 | 14.30 | 02.60 | 07.60 | 21.80 | 11.00 | 15.60 | 00.00 | 05.90 | 02.80 | 04.80 | 02.40 | 03.60 |
| Achieving Mastery | 13.80 | 05.80 | 08.20 | 14.30 | 23.70 | 19.70 | 18.20 | 23.30 | 21.10 | 01.70 | 03.90 | 02.80 | 14.30 | 02.40 | 08.40 |

Levels of Achievement - Locationwise

A glance at Table 6.26 shows that more students from urban areas were at approaching mastery level and above in Sarguja, Rajnandgaon and Raigarh. A large percentage of students from rural areas of Sarguja and Shahdol were at zero level.

Table 6.26: Percentage of Dropouts on Different Levels of Achievement in Literacy (Locationwise)

| Levels | BPR | | RGH | | RNG | | SGJ | | SDL | |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| Zero | 11.80 | 40.00 | 07.10 | 00.00 | 11.20 | 00.00 | 86.00 | 31.30 | 80 70 | 00 00 |
| No MLL | 35.50 | 20 00 | 44.60 | 30.00 | 27.60 | 25.00 | 06.50 | 31.30 | 04.80 | 00 00 |
| Achieving MLL | 31.20 | 40.00 | 23.20 | 30.00 | 27.60 | 08.30 | 04.30 | 18.80 | 02 40 | 00.00 |
| Approaching Mastery | 12.90 | 00 00 | 07.10 | 10.00 | 15 50 | 16.70 | 01.10 | 12.50 | 03.60 | 00.00 |
| Achieving Mastery | 08.60 | 00.00 | 17.90 | 30 00 | 18 10 | 50.00 | 02.20 | 06 30 | 08.40 | 00.00 |

The percentage of dropouts achieving more than 40 per cent scores varied from 7 in Sarguja (rural area) to 70 in Raigarh (urban area)

Levels of Achievement - Castewise

The castewise percentage of dropout students achieving different levels in literacy is presented in Table 6.27 In Shahdol 100 per cent SC dropout students were at zero level In Sarguja and Shahdol more than 83 per cent dropout students of ST were at zero level. On an average dropout students from SC and ST performed the lowest in comparison to OBC and Others. In Bilaspur, 50 per cent students of dropout of Others were at achieving MLL level. About 31 per cent students from SC, ST and OBC were in this category. In Raigarh more than 21 per cent students from SC, ST and OBC were at achieving MLL level. In Rajnandgaon 50 per cent of dropout students of Others were at achieving MLL level. About 10 per cent students from SC, ST and OBC were at approaching mastery level in Bilaspur Twenty five per cent of SC dropout students from Raigarh were at approaching mastery level. In Sarguja and Shahdol less than 10 per cent students were at approaching mastery level

Table 6.27: Percentage of Dropouts on Different Levels of Achievement in Literacy (Caste-wise)

| Levels | BPR | | | | RGH | | | | RNG | | | |
|---------------------|-------|-------|-------|--------|--------|-------|-------|--------|-------|-------|-------|--------|
| | SC | ST | OBC | Others | SC | ST | OBC | Others | SC | ST | OBC | Others |
| Zero | 12.50 | 12.50 | 12.50 | 50.00 | 12.50 | 06.30 | 03.80 | 00.00 | 25.00 | 00.00 | 11.10 | 00.00 |
| No MLL | 40.60 | 25.00 | 35.40 | 00.00 | 25.00 | 53.10 | 34.60 | 00.00 | 25.00 | 42.10 | 25.30 | 00.00 |
| Achieving MLL | 31.30 | 31.30 | 31.30 | 50.00 | 25.00 | 21.90 | 26.90 | 00.00 | 12.50 | 10.50 | 29.30 | 50.00 |
| Approaching Mastery | 09.40 | 12.50 | 14.60 | 00.00 | 25.00 | 03.10 | 07.70 | 00.00 | 12.50 | 21.10 | 15.20 | 00.00 |
| Achieving Mastery | 06.30 | 18.80 | 06.30 | 00.00 | 12.50 | 15.60 | 26.90 | 00.00 | 25.00 | 26.30 | 19.20 | 50.00 |
| Levels | SGJ | | | | SDL | | | | | | | |
| | SC | ST | OBC | Others | SC | ST | OBC | Others | | | | |
| Zero | 57.10 | 86.80 | 72.40 | 76.90 | 100.00 | 83.70 | 69.60 | 75.00 | | | | |
| No MLL | 28.60 | 03.80 | 13.80 | 07.70 | 00.00 | 06.10 | 04.30 | 00.00 | | | | |
| Achieving MLL | 14.30 | 05.70 | 03.40 | 07.70 | 00.00 | 02.00 | 04.30 | 00.00 | | | | |
| Approaching Mastery | 00.00 | 00.00 | 06.90 | 07.70 | 00.00 | 02.00 | 08.70 | 00.00 | | | | |
| Achieving Mastery | 00.00 | 03.80 | 03.40 | 00.00 | 00.00 | 06.10 | 13.00 | 25.00 | | | | |

In Rajnandgaon 50 per cent of dropout students of Others were at achieving mastery level. A look at the Table reveals that the performance of SC and ST dropout students was the worst in achievement.

From the above discussion, it may be concluded that:

1. A large number of dropouts (40 to 84 %) were below not achieving minimum levels of learning in literacy.
2. More girls than boys were in the category of below not achieving minimum levels of learning in literacy.
3. Except Bilaspur in all other districts more dropouts from rural areas were in the category of below not achieving minimum levels of learning in literacy than dropouts from the urban areas
4. More SC dropouts were in the category of below not achieving minimum levels of learning in literacy than ST, OBC or Other castes.
5. A small per cent of dropouts achieved mastery level.
6. The retention of literacy skills was below the satisfactory level.

ACHIEVEMENT IN NUMERACY

The test of numeracy comprised of 8 items. Four items were of addition, 2 items were related to subtraction and 2 items were involving multiplication. The mean achievement of dropouts in numeracy was less than the mean achievement of dropouts in literacy. The mean achievement varied from a low of 0.64 in Sarguja to a high of 1.72 in Rajnandgaon. The mean achievement of dropouts from Rajnandgaon is 22 per cent.

Achievement in Numeracy - Genderwise

A look at Table 6.28 shows that the mean of students is below 2 out of a total score of 8. Overall, boys performed better than girls in numeracy in all the districts except Raigarh. In Raigarh girls performed better than boys in numeracy. The difference is statistically significant.

Table 6.28: Mean Achievement of Dropouts in Numeracy (Genderwise)

| Districts | Boys | | Girls | | Total | | Significance |
|-----------|-------|-------|-------|-------|-------|-------|--------------|
| | Mean | SD | Mean | SD | Mean | SD | |
| BPR | 01.45 | 00.74 | 01.35 | 00.88 | 01.38 | 00.84 | No |
| RGH | 01.11 | 00.87 | 01.71 | 01.27 | 01.45 | 01.15 | Yes |
| RNG | 01.83 | 01.21 | 01.64 | 01.11 | 01.72 | 01.15 | No |
| SGJ | 00.71 | 01.04 | 00.56 | 00.90 | 00.64 | 00.97 | No |
| SDI | 01.00 | 01.19 | 00.73 | 01.12 | 00.87 | 01.15 | No |

Achievement in Numeracy - Locationwise

The mean achievement of dropout students in numeracy according to location is presented in Table 6.29. The achievement of dropout students from urban areas of Raigarh, Rajnandgaon and Sarguja is higher than the mean achievement of dropout students from rural areas. The difference is statistically significant in favour of dropout students of urban areas in Sarguja. In Bilaspur the mean achievement of students from the rural area is higher than mean achievement of dropout students from the urban area. The mean achievement of dropout students from rural area varied from 0.45 in Sarguja to 1.75 in Rajnandgaon. The mean achievement of students from the urban area ranged from 1.20 in Bilaspur to 1.75 in Sarguja.

Table 6.29: Mean Achievement of Dropouts in Numeracy (Locationwise)

| Districts | Rural | | Urban | | Significance |
|-----------|-------|-------|-------|-------|--------------|
| | Mean | SD | Mean | SD | |
| BPR | 01.38 | 00.84 | 01.20 | 00.83 | No |
| RGH | 01.41 | 01.18 | 01.70 | 00.95 | No |
| RNG | 01.75 | 01.19 | 01.50 | 00.67 | No |
| SGJ | 00.45 | 00.77 | 01.75 | 01.29 | Yes |
| SDL | 00.87 | 01.16 | ** | ** | NA |

Achievement in Numeracy - Castewise

The castewise mean achievement of dropout students in numeracy is shown in Table 6.30. The mean achievement of SC varied from 0.43 in Shahdol to 1.75 in Rajnandgaon. The mean achievement of ST dropout students varied from 0.51 in Sarguja to 1.57 in Rajnandgaon. The achievement of dropout OBC students varied from 0.75 in Sarguja to 1.81 in Raigarh. A look at the Table reveals that on an average SC students achieved less in numeracy.

Table 6.30: Mean Achievement of Dropouts in Numeracy (Castewise)

| Districts | SC | | ST | | OBC | | Others | |
|-----------|-------|-------|-------|-------|-------|-------|--------|-------|
| | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| BPR | 01.25 | 00.67 | 01.44 | 00.81 | 01.44 | 00.96 | 01.50 | 00.71 |
| RGH | 01.12 | 01.24 | 01.25 | 01.11 | 01.81 | 01.13 | 00.00 | 00.00 |
| RNG | 01.75 | 01.28 | 01.57 | 00.96 | 01.74 | 01.17 | 02.50 | 02.12 |
| SGJ | 00.92 | 01.43 | 00.51 | 00.84 | 00.75 | 01.02 | 00.61 | 00.77 |
| SDL | 00.43 | 00.78 | 00.75 | 01.07 | 01.17 | 01.27 | 01.25 | 01.89 |

The achievement of dropouts in numeracy was compared among SC, ST, OBC and Others. The results are presented in Table 6.31. Though the mean achievement of dropouts were different for different caste groups, the difference was not statistically significant.

Table 6.31: Comparison of Dropouts in Achievement in Numeracy (Castewise)

| Districts | SC & ST | SC & OBC | SC & Others | ST & OBC | ST & Others | OBC & Others |
|-----------|---------|----------|-------------|----------|-------------|--------------|
| BPR | No | No | No | No | No | No |
| RGH | No | No | No | No | No | No |
| RNG | No | No | No | No | No | No |
| SGJ | No | No | No | No | No | No |
| SDL | No | No | No | No | No | No |

From the above discussion, it may be concluded that:

1. The mean achievement of dropouts in literacy was exceptionally low. It was below 22 per cent in all the districts.
2. Except Raigarh, in all other districts the achievement of dropout boys in numeracy was higher than the achievement of dropout girls.
3. The achievement of dropouts in numeracy from rural and urban areas showed a mixed trend. In Bilaspur and Rajnandgaon the achievement of dropouts from rural areas was higher than the achievement of dropouts from urban areas.
4. The achievement of dropouts in numeracy from different caste groups showed a mixed trend.

LEVELS OF ACHIEVEMENT IN NUMERACY

Different levels of achievement in numeracy were also calculated. The minimum levels of learning were determined to know the percentage of students below not achieving MLL and achieving mastery level

The percentage of dropout students on different levels in numeracy is presented in Table 6.32. More than 50 per cent dropout students from Shahdol and Sarguja achieved zero. About 45 per cent students from Bilaspur, Raigarh and Rajnandgaon were at not achieving MLL. A very small percentage of dropout students from all the five districts were at approaching mastery level.

Table 6.32: Percentage of Dropouts on Different Levels of Achievement in Numeracy (Genderwise)

| Levels | BPR | | | RGH | | | RNG | | |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Zero | 10 30 | 13 00 | 12 20 | 17.90 | 13 20 | 15.20 | 09 10 | 08.20 | 08 60 |
| No MLL | 37 90 | 50.70 | 46.90 | 64.30 | 42 10 | 51.50 | 38.20 | 49.30 | 44.50 |
| Achieving MLL | 48 30 | 27 50 | 37 70 | 10.70 | 21 10 | 16.70 | 29 10 | 23.30 | 25 80 |
| Approaching Mastery | 03.40 | 05 80 | 05 10 | 03.60 | 07 90 | 06 10 | 07 30 | 08 20 | 07.80 |
| Achieving Mastery | 00.00 | 02 90 | 02.00 | 03.60 | 15.80 | 10.60 | 16 40 | 11.00 | 13.30 |
| Levels | SGJ | | | SDL | | | | | |
| | Boys | Girls | Total | Boys | Girls | Total | | | |
| Zero | 60 30 | 62 70 | 61 50 | 45 20 | 58.50 | 51.80 | | | |
| No MLL | 17.20 | 23.50 | 20 20 | 26.20 | 24.40 | 25 30 | | | |
| Achieving MLL | 17 20 | 09 80 | 13 80 | 19.00 | 07 30 | 13.30 | | | |
| Approaching Mastery | 01 70 | 02 00 | 01.80 | 02 40 | 04 90 | 03 60 | | | |
| Achieving Mastery | 03 40 | 02 00 | 02 80 | 07 10 | 04 90 | 06 00 | | | |

Levels of Achievement in Numeracy - Genderwise

More girls than boys were at approaching mastery level in Bilaspur, Raigarh and Rajnandgaon. In Rajnandgaon less than 10 per cent dropout boys and girls scored zero in the numeracy test. Less than 20 per cent dropout boys and girls achieved a score of zero in Bilaspur and Raigarh. More than 50 per cent dropouts from Sarguja and Shahdol scored zero. This shows that they were not able to retain simple numeracy skills. The percentage of dropout boys varied from a low of 55 in Rajnandgaon to a high of 82 in Shahdol in the category of below not achieving MLL. In the same category, the percentage of dropout girls varied from a low of 55 in Raigarh to a high of 85 in Sarguja. Except Raigarh, in all other districts more dropout boys achieved MLL in numeracy than dropout girls. They achieved a score between 40 to 59 per cent.

Levels of Achievement in Numeracy - Locationwise

The percentage of dropouts achieving different levels in numeracy according to location is given in Table 6.33. More than 50 per cent dropout students from rural areas of Shahdol and Sarguja were at zero level. More than 40 per cent students from rural and urban areas of Bilaspur, Raigarh and Rajnandgaon were at not achieving MLL. More dropout students from rural areas of Bilaspur, Raigarh and Rajnandgaon were at approaching mastery level and achieving mastery level in comparison to dropout students from urban areas of respective districts.

Table 6.33: Percentage of Dropouts Achieving Different Levels of Achievement in Numeracy (Locationwise)

| Levels | BPR | | RGH | | RNG | | SGJ | | SDL | |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| Zero | 11.80 | 20.00 | 17.90 | 00.00 | 09.50 | 00.00 | 68.80 | 18.80 | 51.80 | * |
| No MLL | 47.30 | 40.00 | 51.80 | 50.00 | 43.10 | 58.30 | 19.40 | 25.00 | 25.30 | * |
| Achieving MLL | 33.30 | 40.00 | 12.50 | 40.00 | 25.00 | 33.30 | 10.80 | 31.00 | 13.30 | * |
| Approaching Mastery | 05.40 | 00.00 | 07.10 | 00.00 | 07.80 | 00.80 | 00.00 | 12.80 | 03.60 | * |
| Achieving Mastery | 02.20 | 00.00 | 10.70 | 10.00 | 14.70 | 00.00 | 01.10 | 12.50 | 06.00 | * |

* No Urban cases were reported

From the above discussion, it may concluded that.

- 1 A large number of dropouts were below not achieving MLL. They scored less than 40 per cent in the numeracy test
- 2 Less than 10 per cent dropout boys and girls achieved mastery level.
- 3 More dropouts from the rural area were below in the category of achieving MLL than dropouts from the urban area

CHAPTER 7

ACHIEVEMENT OF CLASS II STUDENTS

The present chapter deals mainly with the achievement of Class II students in language and mathematics. However, the data relating to age, preschool experience and grade repetition is also analysed and presented here.

In all the 214 schools covered in the study, the students of Class II were individually tested for literacy and numeracy. A total of 2256 students of Class II were tested through this process. The study was designed to include 20 students from each school. Thus a total sample of Class II students would have been 4280 in an ideal situation. The percentage of students included in the study in comparison to the expected sample is 70.28. The percentage distribution of sample is 29.69 in Bilaspur, 14 in Raigarh, 27.13 in Rajnandgaon, 13.16 in Sarguja and 16 in Shahdol.

AGE

The percentage distribution of Class II students by age is presented in Table 7.1. Generally, in Class I, a five-year old child is admitted. In due course of time, a child of 6 years of age would reach Class II. It is revealed from the Table that the students in Class II are from 6 to 12 years of age. The maximum number of children in Class II are of the age between 6-8 years. The highest percentage of students of Class II are in the age range of 7 years in all the districts.

Table 7.1: Percentage Distribution of Class II Students by Age

| Age in Years | BPR | RGH | RNG | SGJ | SDL |
|--------------|-------|-------|-------|-------|-------|
| 6 | 03.10 | 04.40 | 01.30 | 17.50 | 02.20 |
| 7 | 46.70 | 48.40 | 48.90 | 31.60 | 41.30 |
| 8 | 38.10 | 37.30 | 37.60 | 29.00 | 39.90 |
| 9 | 09.10 | 07.30 | 08.00 | 15.50 | 09.40 |
| 10 | 02.10 | 01.90 | 02.90 | 06.10 | 05.03 |
| 11 | 00.40 | 00.30 | 01.00 | 00.30 | 01.10 |
| 12 | 00.40 | 00.30 | 00.30 | 00.00 | 00.90 |

The percentage of students of Class II in the age of 7 to 8 years is about 85 in Bilaspur, Raigarh and Rajnandgaon. In Sarguja and Shahdol the percentages were 61 and 81, respectively, for the age-group of 7 to 8 years.

About 12 per cent students are in the age range of 9 to 12 years in Bilaspur, Raigarh and Rajnandgaon while in Sarguja and Shahdol the percentages of students in the age range of 9 to 12 years are 22 and 16, respectively. Agewise, Class II is not a homogeneous group. The matter is serious as the development of children at the initial stage is very fast. If the rules of the Department about admission are adhered to then a child of 5 years should be in the school. The need of the hour is to do survey of all school-going children and maintain a record. The parents of these children should be pursued to get their wards enrolled in the school.

From the above discussion, it may be concluded that Class II is not a homogeneous group by age in all the districts.

PRESCHOOL EXPERIENCE

The percentage of children having preschool experience is reported in Table 7.2. In Bilaspur and Shahdol, a very small percentage (less than five) of Class II students had preschool experience. About 10 per cent students in Class II in Sarguja went for preschooling. In Raigarh 26 per cent students in Class II possessed preschool experience.

Table 7.2: Percentage of Class II Students Having Preschool Experience

| District | Percentage |
|----------|------------|
| BPR | 01.50 |
| RGH | 25.90 |
| RNG | 06.70 |
| SGJ | 11.10 |
| SDL | 03.90 |

In the School Record (SR) two questions were related to the availability of preschool facility - the primary schools with preschool facility and preschool facility within a short distance. A reference may be made to the school section. It is revealed that preschool facility was in existence in many districts. But this facility is being availed by a few students. The Anganwadis/Balwadis are expected to act as feeder institutions to primary schools in the area.

From the above discussion, it may be concluded that:

1. About one-fourth students in Class II in Raigarh had preschool experience. In Bilaspur, Rajnandgaon and Shahdol less than 10 per cent students went through preschooling.
2. The preschool institutions in the districts should be feeder institutions to primary schools.

CLASS REPETITION

The data related to the repetition of Class II students is presented in Table 7.3

Table 7.3: Repetition of Class II Students

| District | Percentage |
|----------|------------|
| BPR | 06.60 |
| RGH | 07.60 |
| RNG | 06.50 |
| SGJ | 04.70 |
| SDL | 06.10 |

Though the non-detention policy is in existence a small percentage of students were detained in Class II. The State Government should look into the matter of detention of students. How is this policy being implemented? If children are detained in Class II then why this policy existed? Why the rules/orders of the State Government are not strictly adhered to?

The children pass through traumatic experience of failure or detention. In all the districts less than 8 per cent students had the experience of detention in Class II.

From the above discussion, it may be concluded that in spite of the existence of non-detention policy, a small percentage of students were still detained in Class II.

ACHIEVEMENT IN LANGUAGE

The mean achievement of Class II students in language is presented in Table 7.4. The mean achievement in language ranged from 9.71 in Sarguja to 13.01 in Bilaspur. The range of standard deviation is 5.76 in Rajnandgaon to 7.21 in Shahdol. The higher standard deviation indicated more variance in the achievement of students.

Table 7.4: Mean Achievement of Class II Students in Language

| District | N | Mean | SD |
|----------|------|------------------|-------|
| BPR | 670 | 13.01 (65.05) | 05.86 |
| RGH | 316 | 11.99 (59.95) | 06.28 |
| RNG | 612 | 12.33 (61.65) | 05.76 |
| SGJ | 297 | 09.71 (49.85) | 07.21 |
| SDL | 361 | 09.97 (49.85) | 06.13 |
| Total | 2256 | 11.76 (58.80) | 06.21 |

* Figures in parenthesis indicate percentage

Achievement in Language - Genderwise

The mean achievement of Class II students in language in letter reading and word reading sections is given in Table 7.5. The mean achievement of students in all the five districts in letter reading is higher than mean achievement of students in word reading.

Table 7.5: Mean Achievement of Class II Students in Language (Genderwise)

| Area | Districts | Boys | | Girls | | Total | | Signifi- cance |
|-------------------|-----------|-------|-------|-------|-------|-------|-------|-------------------|
| | | Mean | SD | Mean | SD | Mean | SD | |
| Letter Reading | BPR | 07.79 | 02.20 | 07.70 | 02.73 | 07.46 | 02.48 | Yes |
| | RGH | 06.53 | 03.08 | 07.03 | 02.57 | 06.77 | 02.85 | No |
| | RNG | 07.29 | 02.44 | 07.09 | 02.35 | 07.19 | 02.39 | No |
| | SGJ | 06.25 | 03.59 | 05.29 | 03.52 | 05.85 | 03.58 | Yes |
| | SDL | 06.79 | 02.97 | 06.86 | 03.09 | 06.82 | 03.02 | No |
| Word Reading | BPR | 06.17 | 03.73 | 04.84 | 03.94 | 05.55 | 03.88 | Yes |
| | RGH | 05.23 | 04.00 | 05.18 | 03.87 | 05.21 | 03.93 | No |
| | RNG | 05.55 | 04.02 | 04.71 | 03.71 | 05.13 | 03.89 | Yes |
| | SGJ | 04.73 | 04.23 | 02.64 | 03.77 | 03.86 | 04.16 | Yes |
| | SDL | 03.39 | 04.22 | 02.82 | 03.77 | 03.15 | 04.04 | No |

The mean achievement of Class II students in language varied from 5.85 in Sarguja to 7.46 in Bilaspur. The standard deviation is the highest (3.58) in Sarguja with the lowest mean achievement. This shows that students of Class II in Sarguja ranged more in their achievement in letter reading. The mean achievement of boys varied from 6.25 in Sarguja to 7.79 in Bilaspur. The mean achievement of girls ranged from 5.29 in Sarguja to 7.09 in Rajnandgaon.

The achievement of boys and girls on letter reading was compared to see if there exists a significant difference. It was found that there exists a significant difference among boys and girls of Bilaspur district on the mean achievement in letter reading. The achievement of boys was higher than that of girls. The achievement of boys were also higher than the achievement of girls in the district of Sarguja. The difference was statistically significant. In Raigarh the achievement of girls (mean 7.03) was slightly higher than the achievement of boys (mean 6.53).

In the word reading section, the achievement of Class II students ranged from 3.15 in Shahdol to 5.55 in Bilaspur. The standard deviation was the highest (4.16) in the district of Sarguja, where the mean achievement was 3.86. This shows that maximum variance in achievement was in the district Sarguja.

The mean achievement of boys ranged from 3.39 in Shahdol to 6.17 in Bilaspur. The girls scored mean achievement from 2.64 in Sarguja to 5.18 in Raigarh. Compared to the overall performance of boys and girls, boys scored higher than girls. The difference was statistically significant in the districts of Bilaspur, Rajnandgaon and Sarguja. In all these districts boys scored higher than girls.

Achievement in Language - Locationwise

The locationwise mean achievement of Class II students in language is given in Table 7.6. In letter reading the mean achievement of rural students is higher than the mean achievement of students from the urban area in the districts of Bilaspur, Raigarh and Rajnandgaon. The mean achievement in letter reading of students from the rural area varied from 5.46 in Sarguja to 7.49 in Bilaspur. The mean achievement of urban students ranged from 6.28 in Raigarh to 7.3 in Shahdol.

Table 7.6: Mean Achievement of Class II Students in Language (Locationwise)

| Area | Districts | Rural | | Urban | | Significance |
|----------------|-----------|-------|-------|-------|-------|--------------|
| | | Mean | SD | Mean | SD | |
| Letter Reading | BPR | 07.49 | 02.36 | 07.27 | 02.91 | No |
| | RGH | 06.87 | 02.85 | 06.28 | 02.83 | No |
| | RNG | 07.22 | 02.39 | 07.09 | 02.44 | No |
| | SGJ | 05.46 | 03.81 | 06.51 | 03.08 | Yes |
| | SDL | 06.66 | 03.06 | 07.30 | 02.86 | No |
| Word Reading | BPR | 05.52 | 03.87 | 05.69 | 03.93 | No |
| | RGH | 05.39 | 03.97 | 04.29 | 03.62 | No |
| | RNG | 05.09 | 03.91 | 05.31 | 03.80 | No |
| | SGJ | 03.67 | 04.12 | 04.17 | 04.23 | No |
| | SDL | 03.23 | 04.11 | 02.90 | 03.83 | No |

The achievement of Class II students in letter reading was compared statistically. It was observed that students from the urban area in Sarguja achieved higher than their counterparts from the rural area. The difference is statistically significant.

In word reading section the mean achievement of students from urban areas is slightly higher than the mean achievement of students from rural areas in the districts of Bilaspur, Rajnandgaon and Sarguja. The mean achievement of students from the rural area ranged from 3.23 in Shahdol to 5.52 in Bilaspur. While the mean achievement of students in word reading

from the urban area varied from 2.90 in Shahdol to 5.69 in Bilaspur. The achievement of students from the rural and urban areas in word reading was compared statistically. It was found that there exists no difference in the achievement of students from rural and urban areas in all the five districts.

Achievement in Language - Castewise

The mean achievement of Class II students in language is shown in Table 7.7, according to caste. In the letter reading section it is evident from the Table that the mean achievement of Others is slightly higher than the mean achievement of SC and ST students. Similarly, mean achievement of Others in word reading is higher than SC and ST students

Table 7.7: Mean Achievement of Class II Students in Language (Castewise)

| Area | Districts | SC/ST | | Others | | Signifi- cance |
|----------------|-----------|-------|-------|--------|-------|-------------------|
| | | Mean | SD | Mean | SD | |
| Letter Reading | BPR | 07.12 | 02.65 | 07.69 | 02.32 | Yes |
| | RGH | 06.71 | 02.86 | 06.84 | 02.86 | No |
| | RNG | 07.09 | 02.27 | 07.23 | 02.44 | No |
| | SGJ | 05.03 | 03.82 | 06.42 | 03.28 | Yes |
| | SDL | 06.47 | 03.12 | 07.23 | 02.85 | Yes |
| Word Reading | BPR | 04.77 | 03.94 | 06.11 | 03.75 | Yes |
| | RGH | 04.89 | 03.98 | 05.53 | 03.87 | No |
| | RNG | 04.49 | 03.95 | 05.35 | 03.84 | Yes |
| | SGJ | 03.05 | 03.92 | 04.45 | 04.24 | Yes |
| | SDL | 02.59 | 03.71 | 03.80 | 04.32 | Yes |

The mean achievement of Others in letter reading varied from 6.42 in Sarguja to 7.69 in Bilaspur. Here also the lowest achievement is coupled with the highest (3.28) standard deviation. This shows that more variation in achievement was there in Others in the district Sarguja. The mean achievement of SC and ST students ranged from 5.03 in Sarguja to 7.12 in Bilaspur in letter reading. The students of two groups-Others and SC and ST - were compared to see the difference in achievement in letter reading. It was observed that the students of Class II of Others in letter reading achieved higher than the students of SC and ST in the districts of Bilaspur, Sarguja and Shahdol. The difference was statistically significant. Though there existed a difference in achievement of Class II students in letter reading of two castes in Raigarh and Rajnandgaon the difference was not statistically significant.

The mean achievement of Class II students of Others in word reading was higher than the mean achievement of students of SC and ST in all the five districts. The mean achievement in word reading varied from 3.80 in Shahdol to 6.11 in Bilaspur. Similarly, the mean achievement of SC and ST students of Class II in word reading ranged from 2.59 in Shahdol to 4.89 in Raigarh. The achievement of two groups in word reading was also compared, It was found that the achievement of Others was higher than SC and ST students. The difference is statistically significant in the districts of Bilaspur, Rajnandgaon, Sarguja and Shahdol.

LEVELS OF ACHIEVEMENT IN LANGUAGE

The levels of achievement in Language for Class II students were determined to know the position.

Levels of Achievement - Genderwise

The percentage of Class II students achieving different levels in language (genderwise) is shown in Table 7.8. The overall trend as represented in the Table indicated that more students were at achieving mastery level in letter reading than word reading section in language. The percentage of students at zero level ranged from 4.25 in Bilaspur to 16.2 in Sarguja. More girls were at zero level than the boys in the five districts. The percentage of boys at zero level ranged from 2.5 in Bilaspur to 15.0 in Sarguja. The percentage of Class II students at not achieving MLL varied from 8.1 in Bilaspur to 18.5 in Sarguja. More girls were at this level than boys in the districts of Bilaspur and Sarguja. More boys were at not achieving MLL than girls in the districts of Raigarh, Rajnandgaon and Shahdol. The percentage of Class II students achieving MLL varied from 8.3 in Shahdol to 13.3 in Raigarh.

The percentage of students at approaching mastery level ranged from 21.4 in Sarguja to 31.7 in Rajnandgaon. This range is less. It clearly shows that about 21 to 30 per cent students of Class II achieved scores between 61 to 79 per cent. The percentage of students at mastery level ranged from 34.7 in Sarguja to 50 in Bilaspur. This indicated that on an average 42 per cent secured 80 per cent and above in letter reading. In the districts of Raigarh and Shahdol, more girls were at this level than the boys. More boys than girls were at achieving mastery level in Bilaspur, Rajnandgaon and Sarguja.

In the word reading section, the percentage of students at zero level varied from 19.7 in Bilaspur to 48.2 in Shahdol. This shows that about 35 per cent students from five districts achieved zero in the word reading section. The percentage of boys at zero level ranged from 13.9 in Bilaspur to 50.2 in Shahdol. The percentage of girls ranged from 20.3 in Raigarh to 54.0 in Sarguja.

The percentage of students not achieving MLL varied from 17.5 in Sarguja to 20.8 in Shahdol. The percentage of boys ranged from 15.5 in Shahdol to 19 in Raigarh. The percentage of girls ranged from 20 in Bilaspur to 30 in Raigarh. Below 10 per cent students were at achieving MLL level. The percentage of students approaching mastery level varied from 7.2 in Shahdol to 16.8 in Rajnandgaon. It may be recorded here that about 15 per cent students achieved scores between 61 and 79 in word reading.

Table 7.8: Percentage of Class II Students on Different Levels of Achievement in Language (Genderwise)

| Area | Levels | BPR | | | RGH | | | RNG | | | SGJ | | | SDL | | |
|----------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Letter Reading | Zero | 02.50 | 06.10 | 04.20 | 09.20 | 05.90 | 07.60 | 04.30 | 04.60 | 04.40 | 15.00 | 17.70 | 16.20 | 07.70 | 12.30 | 09.70 |
| | No MLL | 06.70 | 09.70 | 08.10 | 14.70 | 09.20 | 12.00 | 10.50 | 08.50 | 09.50 | 13.90 | 25.00 | 18.50 | 14.50 | 07.10 | 11.40 |
| | Achieving MLL | 08.10 | 11.90 | 09.90 | 11.00 | 15.70 | 13.30 | 09.50 | 16.90 | 13.20 | 09.20 | 09.70 | 09.40 | 07.70 | 09.10 | 08.30 |
| | Approaching Mastery | 27.80 | 28.10 | 27.90 | 26.40 | 28.10 | 27.20 | 30.20 | 33.20 | 31.70 | 21.40 | 21.00 | 21.40 | 32.40 | 27.90 | 30.50 |
| | Achieving Mastery | 55.00 | 44.20 | 50.00 | 38.70 | 41.20 | 39.90 | 45.60 | 36.80 | 41.20 | 40.50 | 26.60 | 34.70 | 37.70 | 43.50 | 40.20 |
| Word Reading | Zero | 13.90 | 26.50 | 19.70 | 25.80 | 20.30 | 23.10 | 21.60 | 22.80 | 22.20 | 32.90 | 54.00 | 41.80 | 50.20 | 45.50 | 48.20 |
| | No MLL | 18.90 | 20.00 | 19.40 | 19.00 | 30.10 | 24.40 | 18.40 | 25.40 | 21.90 | 15.60 | 20.20 | 17.50 | 15.50 | 27.90 | 20.80 |
| | Achieving MLL | 09.40 | 09.40 | 9.40 | 04.30 | 04.60 | 04.40 | 08.20 | 11.40 | 09.80 | 05.20 | 04.80 | 05.10 | 01.90 | 03.20 | 02.50 |
| | Approaching Mastery | 15.30 | 16.80 | 16.00 | 17.80 | 13.10 | 15.50 | 15.10 | 18.60 | 16.80 | 16.20 | 03.20 | 10.80 | 07.70 | 06.50 | 07.20 |
| | Achieving Mastery | 42.50 | 27.40 | 35.50 | 33.10 | 32.00 | 32.60 | 36.70 | 21.80 | 29.20 | 30.10 | 17.70 | 24.90 | 24.60 | 16.90 | 21.30 |

The percentage of student at achieving mastery level ranged from 21.3 in Shahdol to 35.5 in Bilaspur. More boys than girls were at this level. The percentage of boys at achieving mastery level varied from 24.6 in Shahdol to 42.5 in Bilaspur. The percentage of girls ranged from 16.9 in Shahdol to 32.0 in Raigarh.

Levels of Achievement - Locationwise

The percentage of Class II students at different levels of achievement in language according to location is presented in Table 7.9. The percentage of students from rural and urban areas achieved higher in letter reading than word reading.

Table 7.9: Percentage of Class II Students on Different Levels of Achievement in Language (Locationwise)

| Area | Levels | BPR | | RGH | | RNG | | SGJ | | SDL | |
|----------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| Letter Reading | Zero | 03.50 | 07.00 | 08.00 | 05.80 | 04.60 | 03.40 | 20.90 | 08.20 | 10.00 | 08.80 |
| | No MLL | 08.10 | 07.80 | 10.60 | 19.20 | 08.70 | 12.90 | 19.30 | 17.30 | 13.00 | 06.60 |
| | Achieving MLL | 10.00 | 09.30 | 12.10 | 19.20 | 13.70 | 11.20 | 06.40 | 14.50 | 08.10 | 08.80 |
| | Approaching Mastery | 27.50 | 29.50 | 27.30 | 25.00 | 32.30 | 29.30 | 20.90 | 21.80 | 31.90 | 26.40 |
| | Achieving Mastery | 50.80 | 46.50 | 41.70 | 30.80 | 40.70 | 43.10 | 32.60 | 38.20 | 37.00 | 49.50 |
| Word Reading | Zero | 19.60 | 20.20 | 22.70 | 25.00 | 22.40 | 21.60 | 43.90 | 38.20 | 49.30 | 45.10 |
| | No MLL | 19.60 | 18.60 | 21.60 | 38.50 | 22.20 | 20.70 | 17.10 | 18.20 | 19.30 | 25.30 |
| | Achieving MLL | 09.80 | 07.80 | 04.20 | 05.80 | 10.10 | 08.60 | 04.80 | 05.40 | 01.10 | 06.60 |
| | Approaching Mastery | 16.30 | 14.70 | 16.70 | 09.60 | 15.50 | 22.40 | 11.20 | 10.00 | 08.10 | 04.40 |
| | Achieving Mastery | 34.80 | 38.80 | 34.80 | 21.20 | 29.80 | 26.70 | 23.00 | 28.20 | 22.20 | 18.70 |

The percentage of students from the rural area at zero level ranged from 3.5 in Bilaspur to 20.9 in Sarguja. The percentage of students at this level from the urban area varied from 3.4 in Raigarh to 8.8 in Shahdol. The percentage of students from the rural area at not achieving MLL ranged from 8.1 in Bilaspur to 19.3 in Sarguja. The percentage of students from the urban area at this level varied from 7.8 in Bilaspur to 19.2 in Raigarh.

The percentage of students at achieving MLL from the rural area varied from 6.4 in Sarguja to 13.7 in Rajnandgaon. The percentage of students at achieving MLL from the urban area ranged from 8.8 in Shahdol to 19.2 in Raigarh. This indicated that more students from the urban area achieved marks between 40 to 60 per cent than students from the rural area. About three fourth students from the rural area of Bilaspur, Rajnandgaon and Shahdol achieved marks above 61 per cent. In Sarguja. About 55 per cent students achieved marks above 61 per cent. Similarly, in Raigarh about 60 per cent students achieved marks above 61 per cent in letter reading.

In word reading, the percentage of students from the rural area at zero level varied from 19.6 in Bilaspur to 49.3 in Shahdol. More students from the rural area were at zero level in districts of Rajnandgaon, Sarguja, Shahdol in comparison to students from the urban area. In Bilaspur and Raigarh more students from the urban area were at zero level than students from the rural area. The percentage of students from the urban area at zero level ranged from 20.2 in Bilaspur to 45.1 in Shahdol. In word reading, the percentage of students at not achieving MLL from the rural area varied from 17.1 in Sarguja to 21.6 in Raigarh. The percentage of students from the urban area varied from 18.2 in Sarguja to 38.5 in Raigarh. A large number of students achieved below 40 per cent. The percentage of students achieving below 40 per cent were 70 in Shahdol, 58 in Sarguja, 53 in Raigarh, 47 in Rajnandgaon and 38 in Bilaspur in word reading.

The percentage of students achieving more than 61 per cent marks was 52 in Bilaspur, 48 in Raigarh, 46 in Rajnandgaon, 36 in Sarguja and 29 in Shahdol. The achievement of Class II students is not satisfactory. As is evident from the data given in Table 7.8, more than 50 per cent students achieved below 40 per cent except Bilaspur in word reading.

Levels of Achievement - Castewise

The percentage of students of Class II achieving different levels in language is presented in Table 7.10, according to caste. Overall, students performed higher in letter reading than word reading.

**Table 7.10: Percentage of Class II Students on Different Levels of Achievement in
Language (Castewise)**

| Area | Levels | BFR | | RGH | | RNG | | SGJ | | SDL | |
|----------------|---------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| | | SC/ST | Others | SC/ST | Others | SC/ST | Others | SC/ST | Others | SC/ST | Others |
| Letter Reading | Zero | 06.40 | 02.60 | 07.60 | 07.60 | 02.60 | 05.00 | 23.80 | 10.50 | 10.20 | 09.10 |
| | No MLL | 08.90 | 07.40 | 12.00 | 12.00 | 11.10 | 08.90 | 21.40 | 16.40 | 16.30 | 05.50 |
| | Achieving MLL | 08.90 | 10.50 | 13.30 | 13.30 | 19.60 | 11.10 | 07.10 | 11.10 | 07.10 | 09.70 |
| | Approaching Mastery | 33.60 | 23.80 | 32.30 | 22.20 | 26.80 | 33.30 | 17.50 | 24.00 | 33.20 | 27.30 |
| | Achieving Mastery | 42.10 | 65.60 | 34.80 | 44.90 | 39.90 | 41.60 | 30.20 | 38.00 | 33.20 | 48.50 |
| Word Reading | Zero | 25.00 | 15.90 | 26.60 | 19.60 | 28.80 | 20.00 | 50.00 | 35.70 | 51.50 | 44.20 |
| | No MLL | 23.20 | 16.70 | 22.80 | 25.90 | 23.50 | 21.40 | 18.30 | 17.00 | 23.00 | 18.20 |
| | Achieving MLL | 09.60 | 09.20 | 05.70 | 03.20 | 08.50 | 10.20 | 04.80 | 05.30 | 02.60 | 02.40 |
| | Approaching Mastery | 13.60 | 17.70 | 14.60 | 16.50 | 15.70 | 17.20 | 08.70 | 12.30 | 07.70 | 06.70 |
| | Achieving Mastery | 28.60 | 40.50 | 30.40 | 34.80 | 23.50 | 31.20 | 18.30 | 29.80 | 15.30 | 28.50 |

The percentage of SC and ST students at zero level in letter reading varied from 2.6 in Rajnandgaon to 23.8 in Sarguja. On an average the percentage of students of SC and ST at zero level was higher than students of Other castes at this level. The percentage of SC and ST students at not achieving MLL varied from 8.9 in Bilaspur to 21.4 in Sarguja. The percentage of students of SC and ST at not achieving MLL was higher than the percentage of Other castes at this level. The percentage of SC and ST students achieving marks more than 61 per cent in letter reading ranged from 48 in Sarguja to 76 in Bilaspur. The percentage of Other students achieving more than 61 per cent marks in letter reading ranged from 62 in Sarguja to 79 in Bilaspur. The achievement of SC and ST students in letter reading at Class II level was not satisfactory.

The percentage of SC and ST students at zero level in word reading varied from 25 in Bilaspur to 51.5 in Shahdol. The percentage of Other students at zero level in word reading ranged from 15.9 in Bilaspur to 44.2 in Shahdol. The Table reveals that the percentage of students of SC and ST achieving marks in word reading below 40 per cent was high in Bilaspur (48), Raigarh (48), Rajnandgaon (51), Sarguja (68) and Shahdol (74). The percentage of students of Other castes achieving marks above 61 per cent in word reading was 58 in Bilaspur, 52 in Raigarh, 48 in Rajnandgaon, 42 in Sarguja and 23 in Shahdol. This shows that the achievement of students in letter reading and word reading was not satisfactory.

The achievement of Class II students in language was further analysed to identify the items on which students did not fare well. A large number of students was not able to read alphabets pronounced with mixed voice. The students felt difficulty in reading with mixed voice. The students felt difficulty in reading words beginning with matra (48 to 58%) and words beginning with matra and ending with matra (37 to 48%).

From the above discussion, it may be concluded that:

1. The mean achievement of Class II students was about 50 to 60 per cent.
2. As expected the mean achievement in letter reading was higher than word reading.
3. Boys achieved higher than girls in letter reading. The difference in achievement was significant in the districts of Bilaspur and Sarguja.
4. Boys achieved higher than girls in word reading. The difference in achievement was significant in districts of Bilaspur, Rajnandgaon and Sarguja.
5. Students of rural areas in the districts of Bilaspur, Raigarh and Rajnandgaon achieved higher in letter reading than students of urban areas of these districts.
6. Students of urban areas in the districts of Bilaspur, Rajnandgaon and Sarguja achieved higher in word reading than students from rural areas in these districts.

7. The achievement of Other students was higher than the achievement of SC/ST students.
8. The mean achievement of students from Class II in language is not satisfactory according to the criterion prescribed under MLL

ACHIEVEMENT IN MATHEMATICS

Class II mathematics test consisted 14 items in all. The first section of the achievement test in mathematics for Class II consisted of six questions on recognition of small and large numbers. The second section comprised of four questions on addition. In this section, questions were on addition of zero to one digit number. There were four questions on subtraction in the third section involving two and one digit number. The test of numeracy was of total marks of 14.

The mean achievement of Class II students in mathematics is presented in Table 7.11. The mean achievement of Class II students ranged from 4.93 in Shahdol to 7.67 in Raigarh. The mean achievement of Class II students in Sarguja and Shahdol is below 50 per cent.

Table 7.11: Mean Achievement of Class II Students in Mathematics

| Districts | N | Mean | SD |
|-----------|------|------------------|-------|
| BPR | 670 | 07.57 (54.07) | 03.97 |
| RGH | 316 | 07.67 (54.78) | 04.21 |
| RNG | 612 | 07.65 (54.64) | 04.07 |
| SGJ | 297 | 05.25 (37.50) | 04.44 |
| SDL | 361 | 04.93 (35.21) | 04.78 |
| Total | 2256 | 06.87 (49.07) | 04.27 |

The standard deviation varied from 3.97 in Bilaspur to 4.78 in Shahdol. The higher standard deviation indicated more variance in the achievement of Class II students in mathematics.

The mean achievement of Class II students in Bilaspur, Raigarh and Rajnandgaon is about 54 per cent. The achievement in this level indicated that students of Class II had not mastered skills expected from the students of Class I. It implies that the teaching of mathematics in Class II needs improvement.

Achievement in Mathematics - Genderwise

The mean achievement of Class II students in mathematics is presented in Table 7.12, according to gender. For the purpose of analysis, the achievement of students of Class II in mathematics test was bifurcated in: (i) number recognition, and (ii) addition and subtraction

Table 7.12: Mean Achievement of Class II Students in Mathematics (Genderwise)

| Area | Districts | Boys | | Girls | | Total | | Significance |
|--------------------------|-----------|-------|-------|-------|-------|-------|-------|--------------|
| | | Mean | SD | Mean | SD | Mean | SD | |
| Number Recognition | BPR | 03.85 | 01.59 | 03.51 | 01.57 | 03.69 | 01.59 | Yes |
| | RGH | 03.65 | 01.77 | 03.67 | 01.65 | 03.66 | 01.72 | No |
| | RNG | 03.73 | 01.67 | 03.53 | 01.61 | 03.63 | 01.64 | No |
| | SGJ | 03.30 | 02.22 | 02.46 | 02.12 | 02.95 | 02.22 | Yes |
| | SDL | 02.77 | 02.13 | 02.29 | 01.97 | 02.57 | 02.07 | Yes |
| Addition and Subtraction | BPR | 04.21 | 02.86 | 03.49 | 02.86 | 03.87 | 02.88 | Yes |
| | RGH | 03.82 | 03.11 | 04.18 | 02.71 | 04.00 | 02.93 | No |
| | RNG | 04.32 | 02.93 | 03.72 | 02.73 | 04.02 | 02.85 | Yes |
| | SGJ | 02.85 | 02.92 | 01.51 | 02.23 | 02.29 | 02.73 | Yes |
| | SDL | 02.55 | 02.95 | 02.10 | 02.61 | 02.36 | 02.82 | No |

The mean achievement of Class II students in number recognition in mathematics varied from 2.57 in Shahdol to 3.69 in Bilaspur. This indicates that the achievement of students in percentage in the number recognition is low (43%) in Shahdol. The highest achievement in percentage in number recognition was in Bilaspur (62%). On comparing the achievement of boys and girls in number recognition, boys' was found higher than girls' in all the districts. The boys achieved marks, on an average, between 2.77 (46%) in Shahdol to 3.85 (64%) in Bilaspur. The girls achieved marks, on an average, between 2.29 (38%) in Shahdol to 3.67 (61%) in Raigarh. The difference in achievement in number recognition between boys and girls was statistically significant in Bilaspur, Sarguja and Shahdol. Boys achieved higher than girls in number recognition.

The mean achievement of Class II students in addition and subtraction ranged from 2.29 in Sarguja to 4.02 in Rajnandgaon. In terms of percentage the mean achievement in addition and subtraction is 29 in Sarguja, 30 in Shahdol, 48 in Bilaspur, 50 in Raigarh and Rajnandgaon. This shows that the achievement of Class II students in mathematics is poor (below 50%). The achievement of boys and girls in addition and subtraction was compared

The achievement of boys varied from 2.55 in Shahdol to 4.32 in Rajnandgaon. The achievement of girls ranged from 1.51 in Sarguja to 4.18 in Raigarh. The achievement of boys was higher than girls in all the districts except Raigarh. In Raigarh the achievement of girls (4.18) was higher than the achievement of boys (3.82). The difference of achievement was tested for significance. It was observed that boys achieved significantly higher than girls in addition and subtraction in districts of Bilaspur, Rajnandgaon and Sarguja.

Achievement in Mathematics - Locationwise

The achievement of Class II students in mathematics was analysed according to location which is presented in Table 7.13

Table 7.13: Mean Achievement of Class II Students in Mathematics (Locationwise)

| Area | Districts | Rural | | Urban | | Significance |
|--------------------------|-----------|-------|-------|-------|-------|--------------|
| | | Mean | SD | Mean | SD | |
| Number Recognition | BPR | 03.68 | 01.55 | 03.76 | 01.76 | No |
| | RGH | 03.69 | 01.72 | 03.56 | 01.72 | No |
| | RNG | 03.65 | 01.66 | 03.57 | 01.59 | No |
| | SGJ | 02.82 | 02.18 | 03.18 | 02.26 | No |
| | SDL | 02.59 | 02.11 | 02.51 | 01.96 | No |
| Addition and Subtraction | BPR | 03.87 | 2.85 | 03.86 | 03.02 | No |
| | RGH | 04.04 | 02.96 | 03.77 | 02.74 | No |
| | RNG | 04.01 | 02.83 | 04.06 | 02.94 | No |
| | SGJ | 01.90 | 02.46 | 02.95 | 03.03 | No |
| | SDL | 02.29 | 02.78 | 02.57 | 02.92 | No |

The mean achievement of Class II students from rural areas in number recognition varied from 2.59 (43%) in Shahdol to 3.69 (62%) in Raigarh. The mean achievement of Class II students in number recognition from the urban area ranged from 2.51 (42%) in Shahdol to 3.76 (47%) in Bilaspur. The students from the rural area achieved higher than the students from the urban area in number recognition from the districts of Raigarh, Rajnandgaon and Shahdol. The students from the urban area achieved higher than the students from the rural area from the districts of Bilaspur and Sarguja. The difference in achievement of students from rural and urban areas in number recognition was not significant.

The mean achievement of students in addition and subtraction from the rural area ranged from 1.90 (24%) in Sarguja to 4.04 (51%) in Raigarh. The mean achievement of students from the urban area in addition and subtraction varied from 2.57 (32%) in Shahdol to 4.06 (51%) in Rajnandgaon. The performance of students in addition and subtraction from the rural area was compared. It was observed that the students from the urban area of Sarguja achieved higher (2.95) than the students from the rural area (1.90). The difference was statistically significant. In other districts, the mixed trend was visible in achievement of students in addition and subtraction. Overall, students from rural and urban areas achieved higher in number recognition than addition and subtraction.

Achievement in Mathematics - Castewise

The mean achievement of Class II students in mathematics according to castes is shown in Table 7.14. The mean achievement of SC/ST students in number recognition varied from 2.35 (39%) in Shahdol to 3.52 (59%) in Bilaspur. The mean achievement of students from Other castes ranged from 2.82 (47%) in Shahdol to 3.98 (66%) in Raigarh. The performance of students of SC/ST and Others was compared in number recognition. It was observed that the students of Other castes achieved significantly higher than the students of SC/ST in number recognition from the districts of Bilaspur, Raigarh, Sarguja and Shahdol.

Table 7.14: Mean Achievement of Class II Students in Mathematics (Castewise)

| Area | Districts | SC/ST | | Others | | Signifi- cance |
|--------------------------------|-----------|-------|-------|--------|-------|-------------------|
| | | Mean | SD | Mean | SD | |
| Number Recogni- tion | BPR | 03.52 | 01.55 | 03.83 | 01.61 | Yes |
| | RGH | 03.35 | 01.66 | 03.98 | 01.72 | Yes |
| | RNG | 03.41 | 01.67 | 03.71 | 01.63 | No |
| | SGJ | 02.41 | 02.13 | 03.35 | 02.19 | Yes |
| | SDL | 02.35 | 01.97 | 02.82 | 02.16 | Yes |
| Addition and Subtraction | BPR | 03.73 | 02.99 | 03.98 | 02.79 | No |
| | RGH | 03.63 | 02.89 | 04.37 | 02.92 | Yes |
| | RNG | 03.71 | 02.86 | 04.12 | 02.84 | No |
| | SGJ | 01.80 | 02.42 | 02.65 | 02.89 | Yes |
| | SDL | 02.05 | 02.57 | 02.73 | 03.00 | Yes |

The mean achievement of SC/ST students in addition and subtraction varied from 1.80 (23%) in Sarguja to 3.73 (47%) in Bilaspur. The mean achievement of students of other castes in addition and subtraction ranged from 2.65 (33%) in Sarguja to 4.37 (55%) in Raigarh. The performance of students of SC/ST and Others was compared in addition and subtraction. It was observed that students of Other castes achieved higher in addition and subtraction than the students of SC/ST from the districts of Raigarh, Sarguja, and Shahdol.

The students from SC/ST and Others achieved higher in number recognition than addition and subtraction.

LEVELS OF ACHIEVEMENT IN MATHEMATICS

The data was analysed according to levels of achievement of all the five districts. The students were classified into five levels -Zero level, Not Achieving MLL, Achieving MLL, Approaching Mastery and Achieving Mastery

Levels of Achievement - Genderwise

The percentage of Class II students achieving different levels in mathematics according to gender is shown in Table 7.15.

The percentage of students at zero level in number recognition ranged from 5.4 in Bilaspur to 25.4 in Sarguja. The percentage of girls at zero level was higher than the percentage of boys at this level in all the districts.

The percentage of students achieving below 40 per cent ranged from 20 in Bilaspur to 54 in Shahdol.

The percentage of students achieving marks above 61 per cent varied from 21 in Shahdol to 35 in Raigarh. This shows that a large number of students were at achieving MLL level. This group of students from Class II achieved marks between 40 to 60 per cent.

In all the five districts the percentage of girls at achieving MLL was higher than the percentage of boys at this level.

The percentage of students at zero level in addition and subtraction varied from 19.3 in Raigarh to 46 in Shahdol. The percentage of girls at zero level varied from 13.7 in Raigarh to 57.3 in Sarguja. The percentage of students achieving marks below 40 per cent in addition and subtraction varied from 43 in Rajnandgaon to 69 in Shahdol. The percentage of students not achieving MLL was higher for girls than boys in all the districts.

The percentage of students achieving marks above 60 per cent in addition and subtraction varied from 17, in Sarguja to 39 in Raigarh. This shows that the achievement of students in addition and subtraction was poor as a large percentage of students achieved marks below 40 per cent. The percentage of boys achieving marks above 61 per cent in addition and subtraction ranged from 21 in Shahdol to 42 in Rajnandgaon. The percentage of girls achieving marks above 61 per cent in addition and subtraction varied from 8 in Sarguja to 40 in Raigarh.

Table 7.15: Percentage of Class II Students on Different Levels of Achievement in Mathematics (Genderwise)

| Area | Levels | BPR | | | RCH | | | RNG | | | SGI | | | SDL | | |
|--------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Number Recognition | Zero | 04.70 | 06.10 | 05.40 | 08.00 | 05.20 | 06.60 | 03.90 | 05.50 | 04.70 | 20.20 | 30.60 | 24.60 | 22.20 | 27.30 | 24.40 |
| | No MILL | 13.60 | 16.80 | 15.10 | 16.00 | 19.60 | 17.70 | 24.30 | 23.10 | 23.70 | 16.80 | 21.80 | 18.90 | 28.00 | 31.80 | 29.60 |
| | Achieving MILL | 43.30 | 50.00 | 46.40 | 39.90 | 41.20 | 40.50 | 36.10 | 42.70 | 39.40 | 24.90 | 24.20 | 24.60 | 24.20 | 25.30 | 24.70 |
| | Approaching Mastery | 20.60 | 16.50 | 18.70 | 17.80 | 17.00 | 17.40 | 15.70 | 14.30 | 15.00 | 15.00 | 12.90 | 14.10 | 07.70 | 05.80 | 06.90 |
| | Achieving Mastery | 17.80 | 10.60 | 14.70 | 18.40 | 17.00 | 17.70 | 20.00 | 14.30 | 17.20 | 23.10 | 10.50 | 17.80 | 17.90 | 09.70 | 14.40 |
| Addition and Subtraction | Zero | 16.70 | 23.50 | 19.90 | 24.50 | 13.70 | 19.30 | 17.00 | 20.20 | 18.60 | 38.20 | 57.30 | 46.10 | 45.40 | 46.80 | 46.00 |
| | No MILL | 25.00 | 28.70 | 26.70 | 24.50 | 26.10 | 25.30 | 23.30 | 25.70 | 24.50 | 22.00 | 22.60 | 22.20 | 20.80 | 26.60 | 23.30 |
| | Achieving MILL | 21.90 | 19.00 | 20.60 | 12.90 | 19.60 | 16.10 | 17.40 | 25.70 | 21.60 | 16.20 | 11.30 | 14.10 | 12.10 | 13.00 | 12.50 |
| | Approaching Mastery | 06.70 | 08.10 | 07.30 | 08.00 | 19.00 | 13.30 | 11.50 | 08.10 | 09.80 | 05.80 | 04.80 | 05.40 | 03.40 | 03.20 | 03.30 |
| | Achieving Mastery | 29.70 | 20.60 | 25.50 | 30.10 | 21.60 | 25.90 | 30.80 | 20.20 | 25.50 | 17.90 | 04.00 | 12.10 | 18.40 | 10.40 | 15.00 |

Levels of Achievement - Locationwise

The percentage of Class II students achieving different levels in mathematics according to location is given in Table 7.16.

Table 7.16: Percentage of Class II Students on Different Levels of Achievement in Mathematics (Locationwise)

| Area | Levels | BPR | | RGH | | RNG | | SGJ | | SDL | |
|--------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| Number Recognition | Zero | 05.00 | 07.00 | 06.40 | 07.70 | 04.80 | 04.30 | 27.80 | 19.10 | 25.60 | 20.90 |
| | No MLL | 15.00 | 15.50 | 17.40 | 19.20 | 24.20 | 21.60 | 16.00 | 23.60 | 27.40 | 36.30 |
| | Achieving MLL | 48.40 | 38.00 | 41.30 | 36.50 | 37.10 | 49.10 | 26.70 | 20.90 | 25.20 | 23.30 |
| | Approaching Mastery | 18.30 | 20.20 | 15.90 | 25.00 | 16.70 | 07.80 | 16.60 | 10.00 | 07.00 | 06.30 |
| | Achieving Mastery | 13.30 | 19.40 | 18.90 | 11.50 | 17.10 | 17.20 | 12.80 | 26.40 | 14.80 | 13.20 |
| Addition and Subtraction | Zero | 18.90 | 24.00 | 19.70 | 17.30 | 18.80 | 18.10 | 49.20 | 40.90 | 46.30 | 45.10 |
| | No MLL | 27.90 | 21.70 | 25.80 | 23.10 | 24.40 | 25.00 | 25.10 | 17.30 | 24.10 | 20.90 |
| | Achieving MLL | 20.50 | 20.90 | 12.90 | 32.70 | 21.80 | 20.70 | 13.40 | 15.50 | 12.20 | 13.20 |
| | Approaching Mastery | 07.90 | 04.70 | 14.40 | 07.70 | 10.30 | 07.80 | 04.30 | 07.30 | 03.00 | 04.40 |
| | Achieving Mastery | 24.80 | 28.70 | 27.30 | 19.20 | 24.80 | 28.40 | 08.00 | 19.10 | 14.40 | 16.50 |

The percentage of students at zero level in number recognition from the rural area varied from 4.8 in Rajnandgaon to 28 in Sarguja. The percentage of students at zero level in number recognition from the urban area varied from 4.3 in Rajnandgaon to 20.9 in Shahdol. The percentage of students from rural area secured marks below 40 per cent ranged from 24 in Raigarh to 53 in Shahdol. The percentage of students achieving from urban area marks below 40 per cent in number recognition varied from 23 in Bilaspur to 57 in Shahdol. The percentage of students achieving marks above 61 per cent from the rural area ranged from 22 in Shahdol to 34 in Raigarh. The percentage of students achieving marks above 61 per cent in number recognition from the urban area varied from 19 in Shahdol to 39 in Bilaspur. This indicates that a small number of students achieved marks above 61 per cent

in number recognition from rural and urban areas. The percentage of students in the rural area at zero level in addition and subtraction ranged from 18.8 in Rajnandgaon to 49.2 in Sarguja while in the urban area it varied from 17.3 in Raigarh to 45.1 in Shahdol. The percentage of students from the rural area achieving marks below 40 per cent in addition and subtraction varied from 43 in Rajnandgaon to 74 in Sarguja. The percentage of students achieving marks below 40 per cent from the urban area varied from 40 in Raigarh to 66 in Shahdol. This shows that a large number of students from rural and urban areas achieved marks below 40 per cent in addition and subtraction. The percentage of students achieving marks more than 61 per cent from the rural area ranged from 12 in Sarguja to 42 in Raigarh. The percentage of students achieving marks 61 per cent in addition and subtraction from the urban area varied from 21 in Shahdol to 36 in Rajnandgaon.

Levels of Achievement - Castewise

The percentage of students of Class II achieving different levels in mathematics according to caste is presented in Table 7.17. The percentage of students from SC/ST at zero level in number recognition varied from 5.2 in Rajnandgaon to 33.3 in Sarguja while from Other castes it ranged from 4.6 in Rajnandgaon to 20.6 in Shahdol. The percentage of students achieving marks in number recognition below 40 per cent from SC/ST castes varied from 22 in Bilaspur to 55 in Shahdol. But in the case of Other castes it ranged from 19 in Raigarh to 53 in Shahdol.

The percentage of students achieving marks above 61 per cent in number recognition from SC/ST varied from 16 in Shahdol to 29 in Rajnandgaon, whereas the percentage of Other castes varied from 28 in Shahdol to 45 in Raigarh. This indicates that the performance of students of SC/ST in number recognition is comparatively lower than Others in the levels of approaching mastery and achieving mastery level. The percentage of SC/ST students at zero level in addition and subtraction varied from 20.3 in Rajnandgaon to 52.4 in Sarguja while for Other castes it varied from 15.8 per cent in Raigarh to 44.2 per cent in Shahdol. The percentage of SC/ST students achieving marks below 40 per cent in addition and subtraction varied from 50 in Bilaspur to 75 in Shahdol. The percentage of Other castes students achieving marks in addition and subtraction below 40 per cent ranged from 39 in Raigarh to 65 in Sarguja. This shows that a large percentage of students from SC/ST achieved below 40 per cent in addition and subtraction.

The percentage of SC/ST students achieving marks above 61 per cent varied from 9 in Sarguja to 35 in Raigarh whereas for Other castes it ranged from 24 in Shahdol to 36 in Rajnandgaon.

From the above discussion, it may be concluded that:

1. The achievement of students in recognition of small and large numbers is low (20 to 40%). The percentage achievement of students in addition and subtraction is also low (44 to 59%).
2. The achievement of girls in number recognition and addition and subtraction is lower than that of boys.

Table 7.17: Percentage of Class II Students on Different Levels of Achievement in Mathematics (Castewise)

| Area | Levels | BPR | | RGH | | RNG | | SGJ | | SDL | |
|--------------------------|---------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| | | SC/ST | Others | SC/ST | Others | SC/ST | Others | SC/ST | Others | SC/ST | Others |
| Number Recognition | Zero | 06.10 | 04.90 | 07.00 | 06.30 | 05.20 | 04.60 | 33.30 | 18.10 | 27.60 | 20.60 |
| | No MLL | 16.10 | 14.40 | 22.80 | 12.70 | 28.80 | 22.00 | 19.00 | 18.70 | 27.00 | 32.70 |
| | Achieving MLL | 51.80 | 42.60 | 44.90 | 36.10 | 36.60 | 40.30 | 25.40 | 24.00 | 29.60 | 18.80 |
| | Approaching Mastery | 15.00 | 21.30 | 13.90 | 20.90 | 15.00 | 15.00 | 11.90 | 15.80 | 05.10 | 09.10 |
| | Achieving Mastery | 11.10 | 16.90 | 11.40 | 24.10 | 14.40 | 18.10 | 10.30 | 23.40 | 10.70 | 18.80 |
| Addition and Subtraction | Zero | 23.90 | 16.90 | 22.80 | 15.80 | 20.30 | 18.10 | 52.40 | 41.50 | 47.40 | 44.20 |
| | No MLL | 25.70 | 27.40 | 27.20 | 23.40 | 30.10 | 22.70 | 20.60 | 23.40 | 27.60 | 18.20 |
| | Achieving MLL | 18.20 | 22.30 | 14.60 | 17.70 | 16.30 | 23.30 | 17.50 | 11.70 | 11.20 | 13.90 |
| | Approaching Mastery | 06.10 | 08.20 | 15.80 | 10.80 | 11.10 | 09.40 | 03.20 | 07.00 | 03.60 | 03.00 |
| | Achieving Mastery | 26.10 | 25.10 | 19.60 | 32.30 | 22.20 | 26.60 | 06.30 | 16.40 | 10.20 | 20.60 |

3. The achievement of students from rural and urban areas differ significantly in addition and subtraction in Rajnandgaon only. In other districts the difference in achievement of students in number recognition and addition and subtraction is not statistically significant
4. The performance of Other castes students was higher than SC/ST students in number recognition and addition and subtraction
5. The percentage of students achieving marks above 61 per cent in number recognition and addition and subtraction was comparatively low

IDENTIFICATION OF WEAKNESSES

The achievement of students in five most difficult items in language was analysed (Table 7.18). In reading a letter students found the composite letter difficult. In reading words the students of Class II were not able to read matra of ऩ (58.4%).

Table 7.18: Five Most Difficult Items in Literacy

| S.No | Item No | Description of Item | Percentage of Students (who did not read) |
|------|---------|------------------------|---|
| 1 | 13 | Reading Words (Sarala) | 37.80 |
| 2 | 16 | Reading words (Pitaji) | 47.50 |
| 3 | 18 | Reading Words (Pair) | 51.00 |
| 4 | 19 | Reading words (Kor) | 53.10 |
| 5 | 14 | Reading words (Door) | 58.40 |

The achievement of students in mathematics was analysed for the difficult questions (Table 7.19). It was observed that 33 per cent students were not able to complete subtraction. The percentage of students who were not able to do addition with zero varied from 39 to 42. The students (38%) were also not able to select the largest number from two given numbers. Similarly, students (41%) were not able to identify the smallest number from two given numbers.

The weakness at the initial stage of reading and calculation may effect further study in upper classes.

From the above discussion, it may be concluded that

1. The students of Class II need more practice in the use of matras. They had not mastered the reading skills expected from them in class I.
2. In mathematics, the concept of smaller and larger number is not clear to the students of Class II
3. They faced difficulty in doing operation with zero

4. Teachers should be provided training in improving the teaching of language and mathematics at Class I

Table 7.19: Five Most Difficult Items in Numeracy

| S.No | Item No | Description of Item | Percentage of Students (who did not read) |
|------|---------|---------------------------------|---|
| 1 | 12 | Subtraction (8 - 8) | 38 |
| 2 | 3 | Choose Largest number (42, 38) | 38 |
| 3 | 8 | Addition (7 +0) | 39 |
| 4 | 6 | Choose smallest number (34, 4) | 41 |
| 5 | 5 | Addition (0 + 6) | 42 |

CHAPTER 8

STUDENTS CHARACTERISTICS

The present chapter deals with the characteristics of students of Class V from 214 schools of five districts. It was expected to collect data from 30 students of Class V from one school. A total of 6420 students would have to be covered but only 2432 students could be covered. As many schools were not having requisite enrolment of students in Class V, the target of sample was not achieved. Thus only 37.88 per cent students were included in the sample.

The analysis and interpretation of data about students' characteristics such as age, educational and occupational status of parents, paid work done, health and nutritional status, academic support, availability of textbooks, classroom activities, class repetition, etc. is presented in this chapter.

DISTRIBUTION OF STUDENTS

The study covered 1264 boys and 1168 girls. Percentage-wise, the sample consisted of 51.97 per cent boys and 48.02 per cent girls. Locationwise, 1728 students were from the rural area and 704 students were from the urban area.

Distribution of Students - Genderwise

Table 8.1 reveals that percentage of boys and girls is almost equal in the district Rajnandgaon. In the district Raigarh more girls go to school than boys as indicated by the percentage in the Table. About 5 per cent more girls than boys are enrolled in Class V in the district.

Table 8.1: Genderwise Distribution of Class V Students (in per cent)

| Districts | Boys | Girls | Total |
|-----------|-------|-------|--------|
| BPR | 52.00 | 48.00 | 100.00 |
| RGH | 47.80 | 52.20 | 100.00 |
| RNG | 50.20 | 49.80 | 100.00 |
| SGJ | 53.40 | 46.60 | 100.00 |
| SDL | 56.40 | 43.60 | 100.00 |

In districts Shahdol and Bilaspur more boys attended the school than girls. About 13 per cent more boys go to school than girls in the district Shahdol while in Raigarh more girls attend the school than boys.

Distribution of Students - Locationwise

Locationwise data of all the five districts is presented in Table 8.2. In Class V more students are from rural areas than urban areas. The percentage varies from 75 in Bilaspur to 60 in Sarguja

Table 8.2: Locationwise Distribution of Class V Students

| District | Rural | Urban |
|----------|-------|-------|
| BPR | 74.80 | 25.20 |
| RGH | 73.90 | 26.10 |
| RNG | 73.70 | 26.30 |
| SGJ | 60.10 | 39.90 |
| SDL | 65.80 | 34.20 |

The percentage of Class V students is almost same in rural areas in the districts of Bilaspur, Raigarh and Rajnandgaon. In Sarguja the rural and urban percentages were 60 and 40, respectively, while in Shahdol the percentages were 65.8 and 34.2.

Distribution of Students - Castewise

Castewise distribution of Class V students is presented in Table 8.3. The percentage of scheduled caste students varied from 6.9 to 20.8. Bilaspur had the maximum number of scheduled caste students (20.8%) while Shahdol had the lowest (6.9%).

Table 8.3: Castewise Distribution of Class V Students

| District | SC | ST | OBC | Others |
|----------|-------|-------|-------|--------|
| BPR | 20.80 | 13.40 | 50.40 | 15.40 |
| RGH | 11.40 | 33.10 | 49.50 | 06.00 |
| RNG | 08.70 | 11.70 | 73.40 | 06.20 |
| SGJ | 08.00 | 34.40 | 40.50 | 17.00 |
| SDL | 06.90 | 35.50 | 33.70 | 23.90 |

In the districts of Raigarh, Sarguja and Shahdol the percentage of scheduled tribe population is 33.1, 34.4 and 35.5, respectively. Districts of Rajnandgaon and Bilaspur were represented by 13.4 and 11.7 per cent of scheduled tribe students in Class V.

Rajnandgaon was represented by 73.4 per cent students of OBC of Class V which is the highest. In the four districts - Bilaspur, Raigarh, Rajnandgaon and Sarguja - OBCs are a dominant group in the sample of Class V students.

The Census survey 1991 reveals that scheduled tribe population is more (53.8%) in the district of Sarguja. In the districts of Shahdol, Raigarh, Bilaspur and Rajnandgaon, the percentage of scheduled tribe population is 46.3, 47.4, 22.9 and 25, respectively.

Similarly, according to 1991 Census scheduled caste population in the districts of Bilaspur, Raigarh and Rajnandgaon is 17.9, 11.6 and 10.4 per cent, respectively. The scheduled caste population in Sarguja and Shahdol is 5.2 and 7.4 per cent, respectively.

Comparing population figures of the Census 1991 and representation of students of Class V in the sample clearly reveals that SCs and STs are not taking advantage of school education. ST is a dominant group in Shahdol. In all other districts OBCs are a dominant group.

Castewise and genderwise distribution of sample in percentage is presented in Table 8.4. It is revealed from the Table that maximum percentage in the sample of Class V students was of OBC students. More OBC boys were in the school in Class V than OBC girls in all the districts except Bilaspur.

Table 8.4: Percentage Distribution of Class V Students According to Caste and Gender

| District | SC | | ST | | OBC | | Others | |
|----------|-------|-------|-------|-------|-------|-------|--------|-------|
| | B | G | B | G | B | G | B | G |
| BPR | 21.00 | 20.70 | 13.10 | 13.70 | 49.30 | 51.70 | 16.70 | 14.00 |
| RGH | 08.40 | 14.10 | 34.30 | 32.10 | 53.10 | 46.20 | 04.20 | 07.70 |
| RNG | 10.50 | 06.90 | 10.50 | 12.90 | 74.80 | 71.90 | 04.20 | 08.30 |
| SGJ | 06.60 | 09.70 | 34.90 | 33.80 | 45.20 | 35.20 | 13.30 | 21.40 |
| SDL | 08.30 | 05.10 | 38.00 | 32.20 | 33.20 | 34.50 | 20.50 | 28.20 |

According to the 1991 Census, percentage distribution of SCs in the population and percentage distribution of SC students in Class V are compared. The percentage of SC population and SC students is almost the same in all the districts except Rajnandgaon. In Rajnandgaon the SC population is 10.3 per cent while the coverage of SC students is 8.7 per cent. This indicates that in comparison to population proportion less SC children were present in district Rajnandgaon.

According to 1991 Census, the ST population in Madhya Pradesh was 23.27 per cent. In all the districts covered under the study, the percentage of ST population ranged from a low of 23.5 in Bilaspur to a high of 53.6 in Sarguja. The proportion of population to students covered in the study was higher in all the districts. This shows that less ST children were enrolled in the schools in comparison to the ST population.

Maximum population covered in the sample was of OBCs in all the districts.

From the above discussion, it may be concluded that

1. More boys were covered in the study than girls because more boys were present in the school.
2. More students were covered from rural areas because more schools were included in the sample according to the population proportion.
3. In comparison to population proportion less percentage of students of SC were covered from Rajnandgaon and Shahdol.
4. In comparison to population proportion less percentage of students of ST were covered from all the districts. This indicates that less children of ST were enrolled in school.

AGE

Agewise distribution of students of Class V is presented in Table 8.5. The maximum percentage of students was in the age of 11 years in all the districts. This indicates that modal age was 11 years for Class V.

Table 8.5: Agewise Distribution of Class V Students

| Districts | Age (Years) | Boys | Girls | Total |
|-----------|--------------|-------|-------|-------|
| BPR | 9 | 00.50 | 00.50 | 00.50 |
| | 10 | 11.20 | 17.60 | 14.30 |
| | 11 | 43.30 | 47.80 | 45.50 |
| | 12 and above | 45.00 | 34.10 | 39.20 |
| RGH | 9 | 01.40 | 00.00 | 00.70 |
| | 10 | 08.40 | 17.90 | 13.40 |
| | 11 | 49.70 | 60.90 | 55.50 |
| | 12 and above | 40.60 | 21.20 | 30.40 |
| RNG | 9 | 00.00 | 01.30 | 00.70 |
| | 10 | 16.00 | 16.50 | 16.30 |
| | 11 | 45.10 | 53.10 | 49.10 |
| | 12 and above | 39.00 | 28.70 | 33.90 |
| SGJ | 9 | 01.20 | 01.40 | 01.30 |
| | 10 | 30.10 | 37.20 | 33.40 |
| | 11 | 37.30 | 39.90 | 39.90 |
| | 12 and above | 12.20 | 20.70 | 26.30 |
| SDL | 9 | 00.90 | 01.70 | 01.20 |
| | 10 | 18.30 | 21.50 | 19.70 |
| | 11 | 46.30 | 48.00 | 47.00 |
| | 12 and above | 34.40 | 28.80 | 32.00 |

About one-third students were in the age range of 12 years and above. The presence of older students in Class V had made the group heterogeneous.

The percentage distribution of Class V students according to gender is also shown in Table 8.5.

In the age-group 11, more girls than boys were in Class V. In the age-group of 10 the percentage of boys varies to 30.1 in Sarguja to 8.4 in Raigarh. More girls than boys were in the age range. In the age-group of 9 the percentage of boys and girls were very less - between 0.5 to 1.3.

From the above discussion, it may be concluded that:

1. Model age for Class V students is 11 years.
2. More girls than boys were covered in the study of 11 years.
3. About one third students were in the age group of 12 years and above from all the districts except Sarguja.

HEAD OF THE FAMILY

More than 90 per cent families in all the districts were headed by the father. In many families the mother was the head. The percentage of families headed by the mother varied from a low of 1.6 in Sarguja to a high of 4.6 in Bilaspur.

Table 8.6: Head of the Family

| Relationship | BPR | RGH | RNG | SGJ | SDL |
|----------------|-------|-------|-------|-------|-------|
| Father | 90.40 | 94.30 | 92.60 | 92.90 | 95.00 |
| Mother | 04.60 | 03.70 | 02.50 | 01.60 | 02.90 |
| Brother/Sister | 01.50 | 00.00 | 00.50 | 01.60 | 00.50 |
| Other member | 03.50 | 02.00 | 04.30 | 03.90 | 01.40 |

Less than 2 per cent brothers and sisters were also head of the family. The percentage of other members of the family being head varied from a low of 1.4 in Shahdol to a high of 4.3 in Rajnandgaon.

From the above discussion, it may be concluded that the father was head of the family in most of the cases.

EDUCATIONAL LEVEL

The percentage of illiterate fathers of Class V students varied from 18.3 in Bilaspur to 26.7 per cent in Sarguja. The percentage of illiterate mothers of Class V students ranged from 72.9 per cent in Shahdol to 61.8 in Bilaspur as indicated in Table 8.7.

Table 8.7: Distribution of Class V Students According to Educational Status of Parents

| District | Educational Status | Father | Mother | District | Educational Status | Father | Mother |
|----------|----------------------------------|--------|--------|----------|----------------------------------|--------|--------|
| BPR | Illiterate | 18.30 | 61.80 | SGJ | Illiterate | 26.70 | 71.40 |
| | Literate but no formal schooling | 01.70 | 00.50 | | Literate but no formal schooling | 06.40 | 02.90 |
| | Up to Class V | 30.70 | 19.30 | | Up to Class V | 25.10 | 12.90 |
| | High School | 41.30 | 15.30 | | High School | 33.40 | 21.60 |
| | Do not know | 03.00 | 01.40 | | Do not know | 04.20 | 01.60 |
| RGH | Illiterate | 22.70 | 63.90 | SDL | Illiterate | 28.10 | 72.90 |
| | Literate but no formal schooling | 01.70 | 01.70 | | Literate but no formal schooling | 05.70 | 01.50 |
| | Up to Class V | 26.80 | 16.10 | | Up to Class V | 24.90 | 16.70 |
| | High School | 37.50 | 12.40 | | High School | 35.70 | 06.20 |
| | Do not know | 07.40 | 04.70 | | Do not know | 02.50 | 01.00 |
| RNG | Illiterate | 22.30 | 70.10 | | | | |
| | Literate but no formal schooling | 01.30 | 00.30 | | | | |
| | Up to Class V | 36.90 | 14.80 | | | | |
| | High School | 34.80 | 12.50 | | | | |
| | Do not know | 00.80 | 00.50 | | | | |

The fathers of Class V students who studied high school and above were the highest in Bilaspur (41.3%) and the lowest in Sarguja (33.4%)

The percentage of illiterate mothers of Class V students varied from 72.9 in Shahdol to 61.8 in Bilaspur. About 19 per cent mothers of Class V students of Bilaspur passed Class V. The percentage of mothers of Class V students who had passed high school examination and above varied from 6.2 in Shahdol to 15.3 in Bilaspur. Mothers possessing qualifications of this range may help children at home in their studies.

The data relating to illiteracy was analysed further to know the position whether parents could read or write. The analysis is presented in Table 8.8.

Table 8.8: Illiteracy Levels Among Parents

| Districts | Who cannot read | | Who cannot write | |
|-----------|-----------------|--------|------------------|--------|
| | Father | Mother | Father | Mother |
| BPR | 19.90 | 61.80 | 23.20 | 64.60 |
| RGH | 26.80 | 70.90 | 27.80 | 72.90 |
| RNG | 24.60 | 70.40 | 26.90 | 71.10 |
| SGJ | 31.20 | 77.10 | 36.70 | 78.70 |
| SDL | 35.40 | 77.70 | 37.80 | 78.60 |

More than two-third mothers could neither read nor write in all the districts. About one-third fathers could neither read nor write in Sarguja and Shahdol.

From the above discussion, it may be concluded that

1. More than two-third mothers were illiterate.
2. The percentage of illiterate fathers varied from a low of 18 in Bilaspur to a high of 27 in Sarguja.
3. More than one-third fathers were high school passed.
4. The government primary schools were patronised by the parents who are qualified up to high school.

FATHER'S OCCUPATION

The percentage of Class V students according to the occupation of father is given in Table 8.9.

Table 8.9: Percentage of Class V Students According to Father's Occupation

| Occupation | Districts | | | | |
|-----------------|-----------|-------|-------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Agriculture | 48.80 | 50.50 | 49.90 | 44.70 | 64.50 |
| Non-Agriculture | 51.20 | 49.50 | 50.10 | 55.30 | 35.50 |

The occupation of the fathers of Class V students varied from 64.5 per cent in Shahdol to 44.7 in Sarguja. Non-agricultural occupations were dominant in Sarguja. Almost 50 per cent fathers of Class V students were in agriculture in Bilaspur, Raigarh and Rajnandgaon.

A further break-up of non-agricultural occupations is given in to Table 8.10.

Table 8.10: Percentage Distribution of Class V Students According to Categories of Father's Occupation

| Occupation | BPR | RGH | RNG | SGJ | SDL |
|-------------------------|-------|-------|-------|-------|-------|
| Household | 00.40 | 00.30 | 00.20 | 00.30 | 00.50 |
| Domestic Servant | 00.50 | 00.70 | 01.00 | 00.20 | 00.50 |
| Street Vendor | 01.50 | 01.30 | 02.00 | 01.00 | 01.50 |
| Manual Unskilled Worker | 07.90 | 08.40 | 05.40 | 03.90 | 02.00 |
| Skilled Worker | 10.90 | 13.40 | 10.30 | 18.30 | 19.50 |
| Clerical Worker | 04.80 | 02.30 | 02.30 | 02.90 | 03.70 |
| Self-employed | 07.60 | 00.30 | 04.30 | 02.90 | 01.50 |
| Employer / Businessman | 03.50 | 01.00 | 03.10 | 02.30 | 02.50 |
| Manager / Sr. Officer | 00.50 | 00.30 | 00.70 | 00.00 | 00.00 |
| Others | 13.60 | 25.10 | 17.20 | 20.90 | 16.00 |

In all the five districts under study, the percentage of skilled workers was more in comparison to other occupations (10.3 to 19.5%)

From the above discussion, it may be concluded that agriculture was a dominant occupation.

ASSETS

The students were asked to report on important assets owned by the family. It covered land, animals, electricity, well and tube-well. The analysis of the data is shown in Table 8.11.

Table 8.11: Ownership of Some Important Assets

| | Districts | | | | |
|----------------------|-----------|-------|-------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Land | 76.50 | 62.50 | 83.30 | 54.00 | 60.10 |
| Animals | 71.40 | 71.90 | 76.30 | 80.10 | 83.70 |
| Own Well | 16.10 | 24.40 | 27.40 | 45.00 | 54.70 |
| Electric Connections | 72.90 | 42.50 | 66.70 | 57.20 | 50.50 |
| Tube Well | 04.00 | 01.30 | 03.60 | 06.80 | 09.10 |

A large number of families owned land and animals. The percentage of land-owner families varied from a low of 54 in Sarguja to a high of 83.3 in Rajnandgaon. The percentage of families who owned animals varied from a low of 71.4 in Bilaspur to a high of 83.7 in Shahdol.

The percentage of families who owned a well ranged from 16.1 in Bilaspur to 54.7 in Shahdol. There were families which owned even tube-well. The percentage was less than 9. In Raigarh about one per cent family owned a tube-well.

The percentage of houses having electric connections varied from a low of 42.5 in Raigarh to a high of 72.9 in Bilaspur. Many houses were without electricity.

The data relating to land was further analysed according to the area/quantum of land-holding. The mean land-holding is given in Table 8.12. The average size of land holding was 4.66 in Bilaspur with the standard deviation 6.61. The SD is very high. This indicates that wide disparity existed with the land-holding sizes. The average land size was 6.11 in Rajnandgaon with the standard deviation 10.56. Again the figure of standard deviation is greater than the average land size. This revealed that a large variation prevailed. The average land-holding size existed between 4 and 7 with greater standard deviation in all the districts.

Table 8.12: Mean and Standard Deviation of Land Holding

| Description | Districts | | | | |
|-------------------|-----------|-------|-------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Mean Land Holding | 04.66 | 05.61 | 06.11 | 05.89 | 04.67 |
| SD | 06.61 | 06.87 | 10.56 | 04.66 | 04.43 |
| Valid Cases(N) | 641 | 186 | 503 | 201 | 128 |

The ownership of animals did not include hens or ducks. The animals included for the survey were goat, sheep, buffalo, ox, cow, etc. The average number of animals is presented in Table 8.13. The average number of animals varied from 4 to 7 with high standard deviation in all the districts. The standard deviation is always greater than the average number of animals in all the districts.

Table 8.13: Mean and Standard Deviation of Land Holding

| Description | Districts | | | | |
|-----------------|-----------|-------|-------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Mean of Animals | 03.67 | 05.31 | 04.51 | 06.43 | 06.62 |
| SD | 04.65 | 06.75 | 05.94 | 07.08 | 09.63 |
| Valid Cases(N) | 807 | 299 | 609 | 406 | 311 |

PAID WORK BY STUDENTS

No student of Class V from Raigarh and Shahdol reported doing paid work. Less than 4 per cent students of Bilaspur and Rajnandgaon were employed in the paid work. In Sarguja 12 per cent students of Class V were employed in paid jobs as revealed from Table 8.14.

Table 8.14: Percentage of Class V Students Doing Paid Work

| Description | Districts | | | | |
|-----------------------|-----------|-------|-------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Performed paid Labour | 03.10 | 00.00 | 03.80 | 12.00 | 00.00 |

The data about doing paid work was analysed further to know the nature of work. The same is presented in Table 8.14a.

Table 8.14a: Nature of Work

| Description | Districts | | | | |
|-------------------------|-----------|-------|--------|--------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Agricultural | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| Other Skilled/unskilled | 100.00 | 00.00 | 100.00 | 100.00 | 00.00 |

It is revealed from Table 8.14a that all the students were employed in non-agriculture sector. They worked for semi-skilled and unskilled labour.

NUTRITIONAL STATUS

The data related to meals taken regularly is reported in Table 8.15. It is revealed from the Table that most of the students of Class V had meals. On careful analysis it is evident from the Table that a gap existed between morning meal and evening meal. The gap varied from a low of 3 per cent in Bilaspur to a high of 10 per cent in Shahdol.

Table 8.15: Nutritional Status of Students of Class V

| District | Always | | | Sometimes | | | Never | | |
|----------|--------|-------|-------|-----------|-------|--------|-------|-------|-------|
| | M | A | E | M | A | E | M | A | E |
| BPR | 96.20 | 97.30 | 99.60 | 03.00 | 02.10 | 00.40 | 00.90 | 00.60 | 00.00 |
| RGH | 92.60 | 95.30 | 99.70 | 05.40 | 04.00 | 00.300 | 02.00 | 00.70 | 00.00 |
| RNG | 99.30 | 99.00 | 100.0 | 00.30 | 00.70 | 00.00 | 00.30 | 00.30 | 00.00 |
| SGJ | 93.90 | 91.00 | 99.70 | 04.80 | 07.10 | 00.00 | 01.30 | 01.90 | 00.30 |
| SDL | 88.90 | 92.80 | 98.80 | 08.90 | 05.20 | 00.50 | 02.20 | 02.00 | 00.70 |

M - Morning, A- Afternoon, E-Evening

Less than 2 per cent students reported that they missed morning, afternoon or evening meals.

From the above discussion it may be concluded that a small percentage of students of Class V missed their meals.

HEALTH

The health status of students of Class V is given in Tables 8.16 and 8.17. The data related with impairment - vision, hearing, speech and limbs has been analysed. Less than two per cent students reported impairment. The impairment of vision varied from a low of 0.7 per cent in Raigarh and Rajnandgaon to a high of 2.3 per cent in Sarguja.

Table 8.16: Health Status of Students - Impairment

| Impairment | BPR | RGH | RNG | SGJ | SDL |
|------------|-------|-------|-------|-------|-------|
| Vision | 01.00 | 00.70 | 00.70 | 02.30 | 01.50 |
| Hearing | 00.20 | 00.00 | 00.80 | 01.30 | 02.20 |
| Speech | 00.60 | 01.70 | 01.00 | 01.00 | 01.00 |
| Limbs | 01.40 | 00.70 | 01.30 | 01.90 | 01.00 |

The students facing these impairment problems need support from the society and state. They also need special attention of teachers in their studies.

Table 8.17: Health Status of Students -Illness

| Illness | BPR | RGH | RNG | SGJ | SDL |
|--------------|-------|-------|-------|-------|-------|
| Fever | 00.90 | 00.70 | 01.00 | 05.50 | 03.20 |
| Asthama | 01.10 | 01.70 | 00.70 | 01.30 | 02.70 |
| Diarrohoea | 00.20 | 00.00 | 00.50 | 01.30 | 00.20 |
| Skin Disease | 01.40 | 00.30 | 02.00 | 02.90 | 04.20 |

The data related to common illness is presented in Table 8.17. The fever was the most prevailing disease. The percentage of students suffering from fever varied from a low of 0.7 in Raigarh to a high of 5.5 in Sarguja. Skin disease was also prevalent in these districts.

PRE-SCHOOL EXPERIENCE

About 3 per cent students of Class V of districts Bilaspur, Rajnandgaon and Sarguja attended nursery school or ICDS or Balwadis. In Raigarh, a large number of students of Class V attended Balwadi, Nursery and ICDS (15.4%). In Shahdol only 1.1 per cent students of Class V utilised pre-school facilities.

Table 8.18: Percentage of Class V Students Having Undergone Pre-school Education

| District | Category of School | Percentage of Students |
|----------|------------------------------|------------------------|
| BPR | ICDS/ Nursery/ Balwadi | 03.10 |
| RGH | ICDS/ Nursery/ Balwadi | 15.40 |
| RNG | ICDS/ Nursery/ Balwadi | 03.40 |
| SGJ | ICDS/ Nursery/ Balwadi | 03.50 |
| SDL | ICDS/ Nursery/ Balwadi | 01.10 |

It may be concluded that facilities of pre-school education are almost non-existent in these districts or these are not availed by the students.

MOTHER TONGUE

The education in primary school must be imparted in mother tongue. Even the apex court has delivered a judgement in this favour. The data related to the mother tongue of students and medium of instruction in school is given in Table 8.19. A small percentage of students from Bilaspur (2.5), Raigarh (1.0), Sarguja (1.3) and Shahdol (0.5) reported that the medium of instruction is different from the mother tongue.

Table 8.19: Position of Mother Tongue and Medium of Instruction

| Mother Tongue Same | Districts | | | | |
|--------------------|-----------|-------|--------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Yes | 97.50 | 99.00 | 100.00 | 98.70 | 99.50 |
| No | 02.50 | 01.00 | 00.00 | 01.30 | 00.50 |

ACADEMIC SUPPORT

The percentage of Class V students getting academic support from the family varied from 44 in Sarguja to 51 in Bilaspur. In case of girls the percentage ranged from 46 in Shahdol to 58 in Raigarh. Except Shahdol in all the four districts more than 51 per cent students received academic support at home. Table 8.20 reveals that girls received more support than boys from the family.

Table 8.20: Percentage of Class V Students Getting Academic Support from Family

| District | Boys | Girls | Total |
|----------|-------|-------|-------|
| BPR | 51.40 | 57.10 | 54.20 |
| RGH | 44.10 | 58.30 | 51.50 |
| RNG | 45.20 | 58.10 | 51.60 |
| SGJ | 44.00 | 59.30 | 51.10 |
| SDL | 47.60 | 46.30 | 47.00 |

About 50 per cent students of Class V got support from the family. Table 8.21 provides break-up of the support. More than 50 per cent students of Class V received support from the elder brother and sister. Assistance provided by the father to boys of Class V varied from 43.1 per cent in Bilaspur to 55 per cent in Shahdol. Similarly, assistance provided by the father to girls of Class V varied from 32.1 per cent in Bilaspur to 50 per cent in Sarguja.

Table 8.21: Percentage of Class V Students According to the Assistance Provided by Family Members

| District | Gender | Father/ Guardian | Mother | Elder Brother/ Sister | Others |
|----------|--------|---------------------|--------|--------------------------|--------|
| BPR | Boys | 43.10 | 15.30 | 58.30 | 11.10 |
| | Girls | 32.10 | 07.70 | 62.90 | 11.80 |
| RGH | Boys | 44.40 | 09.50 | 46.00 | 14.30 |
| | Girls | 48.40 | 08.80 | 63.70 | 16.50 |
| RNG | Boys | 45.20 | 11.30 | 47.80 | 12.70 |
| | Girls | 34.10 | 08.60 | 58.00 | 16.30 |
| SGJ | Boys | 52.10 | 13.70 | 50.70 | 13.70 |
| | Girls | 50.00 | 15.10 | 59.30 | 17.40 |
| SDL | Boys | 55.00 | 16.50 | 50.50 | 10.10 |
| | Girls | 37.80 | 04.90 | 53.70 | 17.10 |

Mothers extending support to girls of Class V varied from 4.9 per cent in Shahdol to 15.1 per cent in Sarguja. Similarly, percentage of boys of Class V who received support from mother varied from 9.5 in Raigarh to 16.5 in Shahdol.

From the above discussion, it may be concluded that

- 1 Academic support is available to about 50 per cent students of Class V in the family.
- 2 Elder brother/sister extended more academic support than father.
- 3 As reported earlier, most of the mothers were illiterate, hence only a small percentage of mothers extended academic support to wards.

EDUCATIONAL ASPIRATION

A very small percentage of students remained undecided (1 to 4%) or responded to study up to primary level. The percentage of students willing to study up to higher secondary varied from 61.7 in Raigarh to 71.6 in Rajnandgaon. The percentage of students willing to study up to graduation and above ranged from 25.2 in Rajnandgaon to 30.4 in Bilaspur.

Table 8.22: Percentage of Students According to Educational Aspiration

| District | Level | Boys | Girls | Total |
|----------|----------------------------------|-------|-------|-------|
| BPR | Do Not Know/Do not want to study | 01 40 | 00.50 | 01 00 |
| | Primary | 00.00 | 00.30 | 00.10 |
| | Secondary and Hr. Secondary | 59.60 | 78.30 | 68.40 |
| | Graduation and above | 38.90 | 21 00 | 30.40 |
| RGH | Do Not Know/Do not want to study | 03 50 | 02.70 | 03.10 |
| | Primary | 00 00 | 00.00 | 00 00 |
| | Secondary and Hr. Secondary | 54.80 | 68.00 | 61.70 |
| | Graduation and above | 41 30 | 29 30 | 35.20 |
| RNG | Do Not Know/Do not want to study | 02.30 | 02.00 | 02.10 |
| | Primary | 00.70 | 01.30 | 01.00 |
| | Secondary and Hr. Secondary | 72.30 | 70.80 | 71.60 |
| | Graduation and above | 24 50 | 25 80 | 25.20 |
| SGJ | Do Not Know/Do not want to study | 03.00 | 07.20 | 04.90 |
| | Primary | 00.60 | 00.70 | 00.70 |
| | Secondary and Hr. Secondary | 66.50 | 67.60 | 67.00 |
| | Graduation and above | 29.80 | 24.40 | 27.40 |
| SDL | Do Not Know/Do not want to study | 00.90 | 01.70 | 01.20 |
| | Primary | 00 90 | 01 10 | 01.00 |
| | Secondary and Hr. Secondary | 68.70 | 66 60 | 67.80 |
| | Graduation and above | 29 50 | 30 40 | 29 90 |

A fairly large percentage of girls aspired to study up to higher secondary level (67.78%). Surprisingly, more boys than girls aspired for higher level of education - graduation and above.

The data was further analysed for the students who did not want to study further-either do not know or up to primary only. They were asked to assign a reason for the discontinuance of the study. Many students were motivated by the investigators to provide a reason. Very small percentage of students reported after much persuasion. The result is reported in Table 8.23. The standard reply was 'parents do not want' in majority of cases.

Table 8.23: Reasons for Not Intending to Study (in per cent)

| Reasons | BPR | RGH | RNG | SGJ | SDL |
|-------------------------------------|-------|-------|-------|-------|-------|
| 1. Parents do not want to study | 02.00 | 01.33 | 00.50 | 01.30 | 00.70 |
| 2. Have to assist in household work | 00.50 | 00.30 | 00.70 | 00.60 | 00.70 |
| 3. Will have to earn a living | 00.10 | 00.00 | 00.00 | 00.30 | 00.00 |
| 4. Training in household enterprise | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| 5. Studies too difficult | 00.10 | 00.30 | 00.00 | 00.00 | 00.00 |
| 6. Cannot afford textbooks | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| 7. Illness/Not keeping well | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| 8. Will get married | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| 9. Failure/Did not learn anything | 00.00 | 00.00 | 00.00 | 00.00 | 00.20 |
| 10. Teachers are not helpful | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| 11. Schools too far | 00.00 | 00.00 | 00.30 | 00.30 | 00.00 |
| 12. Others | 00.00 | 00.00 | 00.00 | 00.30 | 00.00 |

From the above discussion, it may be concluded that

1. The students of Class V wanted to study up to secondary/higher secondary as it appeared model educational aspiration. Two-third students fell in this category.
2. About one-fourth students intended to study up to graduation.
3. Parental desire is the most important reason for the discontinuance of study.

POSSESSION OF TEXTBOOKS

The percentage of students of Class V possessing essential textbooks (language, mathematics and environmental studies) varied from 95 in Shahdol to 98.7 in Bilaspur.

In the rural area of Sarguja essential textbooks were possessed by 87.5 per cent students of Class V. This indicates that essential textbooks were not available in rural areas to about 12 per cent students.

The percentage of boys and girls possessing essential textbooks is almost the same in all the five districts.

Table 8.24: Percentage of Class V Students Having Textbooks

| District | No. of Books | Rural | Urban | Boys | Girls | Total |
|----------|--------------|-------|-------|-------|-------|-------|
| BPR | 1-3 | 98.60 | 98.69 | 99.00 | 98.30 | 98.70 |
| | 4 and above | 33.40 | 15.80 | 27.60 | 30.50 | 29.00 |
| RGH | 1-3 | 98.40 | 97.00 | 98.40 | 97.80 | 98.10 |
| | 4 and above | 17.60 | 42.30 | 25.20 | 23.10 | 24.10 |
| RNG | 1-3 | 97.40 | 98.80 | 96.80 | 98.70 | 97.70 |
| | 4 and above | 19.60 | 35.60 | 18.30 | 29.40 | 23.80 |
| SGJ | 1-3 | 87.50 | 99.70 | 92.60 | 92.16 | 92.40 |
| | 4 and above | 30.50 | 58.90 | 42.20 | 41.40 | 41.80 |
| SDL | 1-3 | 94.40 | 96.20 | 94.60 | 95.50 | 95.00 |
| | 4 and above | 52.40 | 34.50 | 43.70 | 49.70 | 46.30 |

The percentage of students of Class V from the districts of Bilaspur, Raigarh and Rajnandgaon who possessed more than four textbooks was 29.0, 24.1 and 23.8, respectively. Surprisingly, in the districts of Sarguja and Shahdol the percentage was 41.8 and 46.3, respectively, for the same. The percentage of girl students was more than boys possessing four or more textbooks.

Table 8.25 shows the percentage of availability of three essential books with Class V students in all the five districts. On an average two per cent students do not have mathematics book in Class V in the district Bilaspur.

Table 8.25: Percentage of Class V Students Having Essential Textbooks

| Districts | No. of Books | Rural | Urban | Boys | Girls | Total |
|-----------|--------------|-------|--------|-------|-------|-------|
| BPR | Language | 99.00 | 99.00 | 99.30 | 98.70 | 99.00 |
| | Maths | 98.20 | 97.50 | 98.60 | 97.40 | 98.00 |
| | EVS | 98.80 | 99.50 | 99.30 | 98.70 | 99.00 |
| RGH | Language | 99.50 | 96.20 | 97.90 | 99.40 | 98.70 |
| | Maths | 96.80 | 98.70 | 97.90 | 96.80 | 97.30 |
| | EVS | 99.10 | 96.20 | 99.30 | 97.40 | 98.30 |
| RNG | Language | 97.10 | 98.80 | 96.40 | 98.70 | 97.50 |
| | Maths | 97.30 | 98.80 | 96.70 | 98.70 | 97.70 |
| | EVS | 97.80 | 98.80 | 97.40 | 98.70 | 98.00 |
| SGH | Language | 86.60 | 100.00 | 92.80 | 91.00 | 92.00 |
| | Maths | 86.60 | 99.20 | 91.00 | 92.40 | 91.60 |
| | EVS | 89.30 | 100.00 | 94.00 | 93.10 | 93.60 |
| SDL | Language | 98.90 | 97.10 | 98.70 | 97.70 | 98.30 |
| | Maths | 87.60 | 96.40 | 89.50 | 92.10 | 90.60 |
| | EVS | 96.60 | 95.00 | 95.60 | 96.60 | 96.10 |

About 14 per cent students of rural areas did not possess three essential books viz language, mathematics and environmental studies in district Sarguja. The field staff checked the school bags of students for the availability of textbooks. In rural areas books were not available in the school bags of Class V students while in urban areas the books were available with the students in many cases.

Table 8.26 shows the source of getting textbooks. The percentage of students reporting free supply of textbooks from the school varied from a low of 39.8 in Bilaspur to a high of 80.3 in Raigarh. The reason for this disparity is not known.

Table 8.26: Percentage of Source of Getting Textbooks

| Description | Districts | | | | |
|--|-----------|-------|-------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| Supplied free by school | 39.80 | 80.30 | 60.80 | 59.20 | 45.30 |
| Used copies (brother/sister/friend/relative) | 07.70 | 01.00 | 05.40 | 04.20 | 04.20 |
| Others | 00.70 | 02.00 | 01.00 | 01.30 | 02.00 |

About 5 per cent students got used textbooks from elder brother or elder sister or friends or relatives in all the districts except Raigarh. In Raigarh only one per cent students reported getting used textbooks from friends or relatives.

Less than two per cent students reported other sources of getting textbooks.

Many students purchased textbooks. The data related to the purchasing of textbooks with their numbers is shown in Table 8.27.

Table 8.27: Percentage of Class V Students Who Purchased Textbooks

| Districts | No. of Textbooks purchased | | | | |
|-----------|----------------------------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 |
| BPR | 09.00 | 10.20 | 17.10 | 45.00 | 01.50 |
| RGH | 09.40 | 06.40 | 05.40 | 15.10 | 02.00 |
| RNG | 11.30 | 14.40 | 18.40 | 30.70 | 00.70 |
| SGJ | 07.40 | 09.30 | 07.10 | 27.70 | 04.50 |
| SDL | 09.60 | 11.10 | 14.50 | 45.60 | 00.70 |

Maximum percentage of students reported purchasing of four textbooks. In Bilaspur and Shahdol, 45 per cent students purchased four textbooks. The lowest percentage (15) of students purchased four textbooks in Raigarh among all the districts.

A comparison may be made between Table 8.26 and 8.27. About 40 per cent students got free supply of textbooks from the school while the remaining 60 per cent students arranged their own books. Seven per cent students got used textbooks. The remaining 53 per cent students purchased the textbooks. The students (53%) were distributed in different categories. The number of books purchased by students ranged from one to five.

It is possible that some of the students would have lost the books. Then they had no option but to purchase the books. Based on this phenomenon one may think of the seriousness of the non-availability of textbooks. The constitutional directive of free and compulsory education cannot be fulfilled as parents might feel that books were costly. They had to spend on the textbooks of their wards.

Based on the above discussion, it may be concluded that

1. Textbooks were available with a majority of the students. A small percentage of students did not possess the textbooks.
2. The percentage of non-availability of textbooks with the students of rural areas was higher than the students of urban areas.
3. The textbooks were supplied free of cost to the students but the percentage varied. The State Government should look into the matter.
4. About 20 to 50 per cent students purchased the textbooks.

READING MATERIAL

Boys and girls of Bilaspur and Sarguja had access to reading material other than textbooks in almost equal percentage (about 18) as depicted in Table 8.28. In Raigarh, Rajnandgaon and Shahdol more girls than boys had access to reading material.

Table 8.28: Access of Class V Students to Reading Material other than Textbooks

| District | Boys | Girls | Total |
|----------|-------|-------|-------|
| BPR | 19.50 | 18.60 | 19.10 |
| RGH | 13.30 | 26.90 | 20.40 |
| RNG | 19.30 | 22.40 | 20.90 |
| SGJ | 18.70 | 18.60 | 18.60 |
| SDL | 16.60 | 24.30 | 20.00 |

Table 8.28 also indicates that about one-fifth of Class V students had access to reading material other than textbooks.

The percentage of Class V students reporting access to the newspaper varied from 7.7 in Rajnandgaon to 12.5 in Sarguja (Table 8.29).

Table 8.29: Access of Class V Students to the Newspaper

| District | Boys | Girls | Rural | Urban | Total |
|----------|-------|-------|-------|-------|-------|
| BPR | 09 00 | 09 60 | 07 90 | 13 30 | 09.30 |
| RGH | 04 20 | 14 10 | 05 40 | 20 50 | 09 40 |
| RNG | 05 60 | 09 90 | 04.70 | 16 30 | 07 70 |
| SGJ | 11 40 | 13 80 | 10 70 | 15 30 | 12.50 |
| SDL | 10 50 | 08 50 | 09 00 | 10 80 | 09 60 |

More girls than boys had access to the newspaper. More students of urban areas than rural areas got the newspaper.

From the above discussion, it may be concluded that

- 1 About twenty per cent students had access to reading material other than textbooks
- 2 About 10 per cent students got the newspaper. More students from urban areas had access to newspaper than students from rural areas.

INSTRUCTIONAL ACTIVITIES

Table 8.30 presents different instructional activities in the classroom being followed in the five districts of Chhatisgarh region.

About 12 per cent students of Class V from the districts of Bilaspur and Rajnandgaon reported that they were asked to read aloud in the classroom by the teacher. Similarly, about 24 per cent students of Class V from the districts of Raigarh, Sarguja and Shahdol reported the same practice in the classroom.

The practice of loud reading is more followed in the rural than urban areas in Bilaspur, Raigarh, Rajnandgaon and Sarguja. In Shahdol there existed no difference between rural and urban areas regarding following of the practice.

It appears that in the rural areas teachers believe in loud reading while in urban areas teachers do not practise it for sophistication. Probably, the traditional teachers believe in repeating while modern teachers do not believe in repeating the words loudly.

The percentage of giving dictation by teachers varied from 8 in Rajnandgaon to 19.7 in Shahdol. This practice is more followed in rural than urban areas in districts of Bilaspur, Raigarh, Rajnandgaon and Sarguja. The trend is reversed in Shahdol. The practice of giving dictation by teachers was perceived more in the urban than rural areas in Shahdol.

Table 8.30: Percentage of Class V Students Reporting Different Instructional Activities in the Classroom (Genderwise)

| Instructional Activities | BPR | | RGH | | RNG | | SGJ | | SDL | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | B | G | B | G | B | G | B | G | B | G |
| Reading aloud | 14.50 | 16.50 | 30.80 | 18.60 | 10.10 | 14.50 | 25.30 | 20.70 | 32.30 | 20.90 |
| Giving Dictation | 07.90 | 14.50 | 16.10 | 05.10 | 06.20 | 09.90 | 16.90 | 18.60 | 24.50 | 13.60 |
| Giving Arithmetic Problems | 20.70 | 28.20 | 43.40 | 26.30 | 26.80 | 31.70 | 30.70 | 31.70 | 25.80 | 29.40 |
| Feedback on Test | 38.10 | 43.40 | 44.10 | 29.50 | 28.40 | 37.00 | 23.50 | 26.90 | 27.90 | 26.60 |
| Giving Homework | 27.40 | 34.10 | 34.30 | 23.70 | 35.30 | 38.30 | 18.10 | 20.00 | 22.70 | 12.40 |
| Correction of Homework | 30.80 | 39.50 | 42.70 | 21.20 | 38.90 | 42.90 | 22.80 | 23.50 | 27.90 | 27.10 |
| Giving Special help | 41.20 | 47.50 | 42.00 | 44.20 | 43.10 | 52.80 | 37.20 | 32.50 | 33.20 | 36.20 |
| Difficulty in understanding the teacher's language | 05.00 | 04.40 | 07.70 | 09.60 | 05.60 | 05.30 | 24.80 | 28.90 | 07.40 | 07.30 |

The percentage of giving arithmetic problems to the class by teachers ranged from 23.2 in Raigarh to 31.2 in Sarguja. This practice was more followed in rural than urban areas of Bilaspur and Sarguja. In the districts of Raigarh, Rajnandgaon and Shahdol the practice was more followed in urban than rural areas.

The percentage of giving tests to students of Class V varied from 88.1 in Sarguja to 99.2 in Bilaspur. It appears that teachers were regular in giving tests as it was a part of the system.

The percentage of 'Feedback given to students of Class V on the performance in tests' ranged from 25.1 in Sarguja to 40.6 in Bilaspur. Except in Shahdol, in all other districts teachers of urban than rural areas followed this practice more.

The percentage of 'Teachers giving homework to students of Class V' varied from 18.2 in Shahdol to 36.8 in Rajnandgaon. The practice was more followed in rural than urban areas of Bilaspur, Raigarh, Rajnandgaon and Sarguja. In Shahdol, the practice is almost the same in rural and urban areas.

The practice of giving homework by the teachers is one dimension and its correction is another dimension. The percentage of 'Correcting homework of students of Class V by teachers' varied from 23.2 in Sarguja to 40.9 in Rajnandgaon. The practice was more followed in the urban than rural areas of Bilaspur, Raigarh and Rajnandgaon. In districts of Sarguja and Shahdol the practice is more followed in rural than urban areas.

Students of Class V perceiving 'Teacher as helpful at the face of difficulty in doing class work' varied from 34.5 in Shahdol to 47.9 in Rajnandgaon. The extension of help by teachers in doing class work was more in urban than rural areas of Raigarh, Rajnandgaon and Shahdol. In Sarguja, students of Class V of rural than urban areas perceived the teacher as more helpful. The perception of students of rural and urban areas of Bilaspur was almost the same.

A small percentage of students of Class V (less than 10) perceived difficulty in understanding teachers' language in four districts. This shows that teachers of Chhatisgarh region could communicate well with the students of Class V except in Sarguja. The percentage of students having difficulty in understanding teachers' language in Sarguja was 27 which is on higher side.

Table 8.31: Percentage of Class V Students Reporting Regular Instructional Activities in the Classroom (Locationwise)

| Instructional Activities | BPR | | | RGH | | | RNG | | |
|---------------------------------------|--------|-------|-------|-------|-------|-------|-------|--------|-------|
| | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban | Total |
| Reading aloud | 17.40 | 09.90 | 15.50 | 28.50 | 12.80 | 24.40 | 12.70 | 11.30 | 12.30 |
| Giving Dictation | 12.90 | 05.40 | 11.00 | 14.00 | 06.00 | 10.40 | 09.60 | 03.80 | 08.00 |
| Giving Arithmetic Problems | 27.20 | 15.80 | 24.30 | 33.00 | 38.50 | 34.00 | 23.20 | 46.30 | 29.20 |
| Giving Tests | 100.00 | 98.00 | 99.20 | 94.60 | 99.90 | 96.00 | 93.30 | 100.00 | 95.00 |
| Feedback on Test | 38.60 | 46.80 | 40.60 | 34.40 | 42.30 | 36.50 | 26.90 | 48.80 | 32.70 |
| Giving Homework | 34.40 | 19.20 | 30.60 | 29.90 | 25.60 | 28.80 | 34.30 | 43.80 | 36.80 |
| Correction of Homework | 33.90 | 37.40 | 34.80 | 29.00 | 38.50 | 31.40 | 38.10 | 48.80 | 40.90 |
| Special Instruction given to children | 44.40 | 43.80 | 44.20 | 41.60 | 47.40 | 43.10 | 41.40 | 66.30 | 47.90 |
| Understanding the teacher's language | 05.10 | 03.40 | 04.70 | 10.90 | 02.60 | 08.70 | 05.60 | 05.00 | 05.40 |

(Contd on the next page)

Table 8.31: Percentage of Class V Students Reporting Regular Instructional Activities in the Classroom (Locationwise)

| Instructional Activities | SGJ | | | SDL | | |
|---------------------------------------|-------|-------|-------|-------|-------|-------|
| | Rural | Urban | Total | Rural | Urban | Total |
| Reading aloud | 29.40 | 13.60 | 23.20 | 27.00 | 28.10 | 27.30 |
| Giving Dictation | 20.90 | 17.90 | 17.90 | 15.40 | 28.10 | 19.70 |
| Giving Arithmetic Problems | 34.20 | 26.60 | 31.20 | 26.60 | 28.80 | 27.30 |
| Giving Tests | 80.80 | 99.20 | 88.10 | 92.90 | 99.20 | 95.10 |
| Feedback on Test | 22.50 | 29.00 | 25.10 | 29.60 | 23.00 | 27.30 |
| Giving Homework | 21.90 | 14.50 | 19.00 | 17.60 | 19.40 | 18.20 |
| Correction of Homework | 26.70 | 17.70 | 23.20 | 30.70 | 21.60 | 27.60 |
| Special Instruction given to children | 40.60 | 25.80 | 34.70 | 33.00 | 37.40 | 34.50 |
| Understanding the teacher's language | 37.40 | 11.30 | 27.00 | 07.90 | 06.50 | 07.40 |

Genderwise percentage of perception of Class V students on various instructional activities is presented in Table 8.30. In Bilaspur and Rajnandgaon instructional activities were in favour of girls. In the remaining districts, these were in favour of boys.

Considering Tables 8.30 and 8.31, the percentage of instructional activities in school were very less as perceived by students of Class V. Locationwise and genderwise differences are visible in different instructional activities. About one tenth of students of Class V perceived difficulty in understanding the language of teacher in the classroom.

From the above discussion, it may be concluded that

- 1 Involvement of students in the classroom activities is limited
- 2 Feedback after the test was not provided to the students
- 3 Homework was given in limited quantity but not corrected regularly
- 4 A small percentage of students had difficulty in understanding the language of teachers
- 5 Teachers provided special help to a limited number of students
- 6 The perception of students from rural and urban areas about classroom activities was different. Similarly, boys and girls also had different perception about classroom activities.
- 7 Special efforts and training to the teachers were required to promote the participation of students into classroom activities

ACTIVITIES ON TEACHER ABSENCE

The students were asked what do they do when the teacher is absent. The results are tabulated and presented in Table 8.32. Most of the students reported that another teacher was asked to take the class. The percentage of students varied from a low of 29.6 in Sarguja to 61.9 in Raigarh. It is possible that these schools had other teachers present in the school. Some of the students reported that two classes were combined in the absence of one teacher.

Table 8.32: Activities When Teacher is Absent

| What is done when the teacher is absent | BPR | RGH | RNG | SGJ | SDL |
|---|-------|-------|-------|-------|-------|
| Pupils Work Independently | 37.70 | 21.10 | 35.10 | 13.20 | 26.60 |
| Another pupil supervises the work | 19.30 | 06.00 | 15.30 | 05.80 | 03.40 |
| Another teacher is assigned | 37.90 | 61.90 | 44.30 | 29.60 | 48.30 |
| Classes are combined | 00.10 | 00.00 | 00.70 | 12.90 | 04.20 |
| Pupils play or go home | 05.00 | 11.00 | 04.60 | 35.00 | 17.50 |

What happened in the school when the teacher was absent and the school had one or two teachers. In Bilaspur in the case of teacher's absence, 62 per cent students reported three types of activities

- 1 The students worked on their own
- 2 A student supervised the work of the whole class.
- 3 Students played or allowed to go home

The percentage of students who reported the above three activities was 38 in Raigarh, 54 in Rajnandgaon, 58 in Sarguja and 48 in Shahdol.

From the above discussion, it may be concluded that:

- 1 A teacher was provided either to take a class or combine a class when the teacher was absent
- 2 Students were free to carry out their activities when the teacher was absent

CLASS REPETITION

The data related to the failure of students is presented in Table 8.33

Table 8.33: Percentage of Class V Students Failing more than Once

| District | Once | Twice | Thrice |
|----------|--------|-------|--------|
| BPR | 75.00 | 25.00 | 00.00 |
| RGH | 100.00 | 00.00 | 00.00 |
| RNG | 66.70 | 33.00 | 00.000 |
| SGJ | 87.50 | 12.50 | 00.00 |
| SDL | 75.00 | 00.00 | 25.00 |

The percentage of students repeating the class once varied from a low of 66.7 in Rajnandgaon to a high of 100 in Raigarh

In Shahdol 25 per cent students repeated the class thrice

This data revealed the non-implementation of the non-detention policy. It existed on paper only.

The classwise break-up of repetition is given in Table 8.34. The Table shows that maximum number of students repeated Class III or IV.

Table 8.34: Percentage of Class V Students Repeating Classes

| Class | District | | | | |
|---------------------------------|----------|-------|-------|-------|-------|
| | BPR | RGH | RNG | SGJ | SDL |
| I | 06.20 | 05.40 | 02.60 | 03.20 | 01.70 |
| II | 03.30 | 04.30 | 04.10 | 03.50 | 02.50 |
| III | 24.20 | 10.00 | 16.30 | 13.50 | 14.80 |
| IV | 16.20 | 10.70 | 15.30 | 10.00 | 14.50 |
| V | 00.50 | 01.70 | 00.50 | 02.60 | 01.00 |
| Repeated one or the other class | 50.70 | 32.20 | 38.80 | 32.80 | 34.50 |

Table 8.35 shows the castewise class repetition. No clear-cut trend is visible in the table.

Table 8.35: Castewise Failure/Detention of Students

| Class | District | | | | | | | | | | | | |
|-------|----------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|--------|--|
| | BPR | | | | | RGH | | | | | RNG | | |
| | SC | ST | OBC | Others | SC | ST | OBC | Others | SC | ST | OBC | Others | |
| I | 07.70 | 10.20 | 04.20 | 07.30 | 00.00 | 10.10 | 04.10 | 00.00 | 01.90 | 01.40 | 02.90 | 02.60 | |
| II | 04.20 | 05.60 | 02.20 | 04.00 | 14.70 | 03.00 | 03.40 | 00.00 | 01.90 | 04.20 | 04.70 | 00.00 | |
| III | 28.00 | 15.70 | 21.10 | 36.30 | 14.70 | 08.10 | 09.50 | 06.70 | 18.90 | 26.80 | 15.00 | 07.90 | |
| IV | 16.70 | 12.00 | 14.70 | 24.20 | 17.60 | 16.20 | 06.80 | 00.00 | 13.20 | 18.30 | 15.70 | 07.90 | |
| V | 00.00 | 00.00 | 00.70 | 00.80 | 00.00 | 03.00 | 01.40 | 00.00 | 03.80 | 00.00 | 00.20 | 00.00 | |
| Class | District | | | | | | | | | | | | |
| | SGJ | | | | | SDL | | | | | | | |
| | SC | ST | OBC | Others | SC | ST | OBC | Others | SC | ST | OBC | Others | |
| I | 00.00 | 00.90 | 0.40 | 07.50 | 03.60 | 02.10 | 00.70 | 02.10 | 03.60 | 02.10 | 00.70 | 02.10 | |
| II | 04.00 | 00.90 | 0.40 | 07.50 | 00.00 | 02.80 | 02.20 | 03.10 | 00.00 | 02.80 | 02.20 | 03.10 | |
| III | 08.00 | 08.40 | 21.40 | 07.50 | 07.10 | 13.20 | 21.90 | 09.30 | 07.10 | 13.20 | 21.90 | 09.30 | |
| IV | 08.00 | 10.30 | 12.70 | 03.80 | 21.40 | 10.40 | 16.10 | 16.50 | 21.40 | 10.40 | 16.10 | 16.50 | |
| V | 04.00 | 01.90 | 02.40 | 03.80 | 00.00 | 00.70 | 00.70 | 02.10 | 00.00 | 00.70 | 00.70 | 02.10 | |

From the above discussion, it may be concluded that

- 1 The students of Class V repeated classes in spite of the non-detention policy in existence
- 2 All the students of Raigarh repeated a class three-fourth students in Bilaspur and Shabdol failed once In Sarguja, 88 per cent students repeated a class
- 3 Students repeated one or the other class in all the districts About one-third students have undergone through this traumatic experience in all the districts except Bilaspur In Bilaspur, half of the students repeated one or the other class
- 4 Class III is crucial stage in all the schools The percentage of students repeating Class III varied from a low of 10 in Raigarh to a high of 24 in Bilaspur
- 5 A pattern is not visible castewise
- 6 Te implementation of non-detention policy should be reviewed
- 7 All efforts ought to be made to check failure or detention at the school stage

CHAPTER 9

ACHIEVEMENT OF CLASS V STUDENTS

The main objective of the study was to collect the bench-mark data of students of Class V in achievement in language and mathematics. The data of achievement in language and mathematics is analysed, interpreted and reported. Efforts were made to study relationship between achievement in language and mathematics. Similarly, data relating to the schools having achievement of students below 40 per cent is also given in this chapter

Class V students of all the five districts were administered achievement test in language and mathematics. In all 2432 students of Class V participated in the baseline assessment study. In this section efforts have been made to present the achievement of students in language according to gender, location and caste. A further analysis of achievement score is presented according to levels of attainment

ACHIEVEMENT IN LANGUAGE

Class V language achievement test comprised of two sections. The first section was of Word Meaning (WM) which comprised of 40 items, 22 items were of antonyms (WMA) and 18 items were of synonyms (WMS).

The second section was of Reading Comprehension. A student of Class V was expected to read a short passage and then he was asked to answer the question based on the text. This section comprised of 44 items. The reading comprehension section was distributed in four categories. Questions in Reading Comprehension, word meaning or sentences (RCF) were asked in 5 items. Twenty items were comprised of Reading Comprehension Factual (RCF) details, Reading Comprehension Drawing Inferences (RCI) was asked in 13 items. Reading Comprehension getting the central idea (RCC) or title contains 2 items.

The achievement of students of Class V in language (Hindi) is presented in Table 9.1. The test comprised of 84 items. Each item was marked as one. A look at the Table reveals that the achievement of students is below 50 per cent in all the districts. The achievement is the lowest (33.54%) in Shahdol as indicated by mean score 28.18. The achievement is the highest (43.20%) in Raigarh as represented by the mean score 36.29. The variance is also the lowest as indicated by standard deviation 10.73 in Raigarh. The variance is the highest in Bilaspur. This shows that achievement scores of students scattered in large range.

Table 9.1: Mean Achievement of Class V Students in Language

| District | N | Mean | SD |
|----------|------|------------------|-------|
| BPR | 807 | 33.88 (40.23) | 15.31 |
| RGH | 299 | 36.29 (43.20) | 10.73 |
| RNG | 609 | 32.41 (38.58) | 13.05 |
| SGJ | 311 | 31.82 (37.88) | 13.13 |
| SDL | 406 | 28.18 (33.54) | 12.46 |
| Total | 2432 | 31.36 (37.33) | 12.91 |

Figures in parentheses indicate percentage

The further analysis of achievement in language according to two sections - Word Meaning (WM) and Reading Comprehension (RC)- is presented in Table 9.2.

Table 9.2: Mean Achievement of Class V Students in Language (Genderwise)

| Area | Districts | Boys | | Girls | | Total | | Significance |
|-----------------------|-----------|-------|-------|-------|-------|-------|-------|--------------|
| | | Mean | SD | Mean | SD | Mean | SD | |
| Word Meaning | BPR | 19.32 | 08.49 | 16.42 | 10.13 | 17.92 | 09.42 | Yes |
| | RGH | 21.00 | 07.30 | 19.63 | 06.64 | 20.28 | 06.99 | No |
| | RNG | 18.02 | 07.93 | 16.95 | 09.21 | 17.48 | 08.60 | No |
| | SGJ | 18.82 | 07.73 | 17.88 | 08.15 | 18.41 | 07.91 | No |
| | SDL | 15.81 | 07.85 | 15.79 | 09.14 | 15.80 | 08.42 | No |
| Reading Comprehension | BPR | 17.09 | 07.24 | 14.72 | 08.45 | 15.95 | 07.93 | Yes |
| | RGH | 16.15 | 05.89 | 15.87 | 05.78 | 16.01 | 05.83 | No |
| | RNG | 14.91 | 06.75 | 14.92 | 06.35 | 14.91 | 06.55 | No |
| | SGJ | 13.45 | 06.66 | 13.34 | 07.91 | 13.41 | 07.25 | No |
| | SDL | 12.83 | 05.44 | 11.79 | 07.10 | 12.38 | 06.23 | No |

The maximum score in the word meaning section was 40. There were 40 items, each item carrying one mark. The mean score in word meaning section is 20.28 in Raigarh. The average score is just 50 per cent. In all other districts achievement in word meaning is below 50 per cent. The achievement is the lowest in Shahdol and the mean score is 15.8 which is 40 per cent. The mean score in Bilaspur and Sarguja is 45 per cent while it is 43 per cent in Rajnandgaon. The average achievement of students in word meaning varied from 40 to 50 per cent in Chhatisgarh region.

Achievement in Language - Genderwise

The genderwise analysis of word meaning score is also indicated in Table 9.2. The mean of word meaning score varied from 18.02 in Rajnandgaon to 21 in Raigarh for boys. For Shahdol the mean of word meaning score for boys was 15.8. For girls the mean of word meaning score ranged from 15.79 in Shahdol to 19.63 in Raigarh. The achievement of boys in word meaning test is below 50 per cent in all the districts except Raigarh. The achievement of girls is below 50 per cent in all the districts. Boys scored better than girls in all the five districts. The difference is not statistically significant except in the district Bilaspur. The difference in word meaning score is significant in favour of boys in Bilaspur district at 0.05 level.

The mean of reading comprehension score varied from 12.38 in Shahdol to 16.01 in Raigarh. The achievement of boys in reading comprehension is below 40 per cent in all the districts. The achievement of boys in reading comprehension is just 30 per cent in Shahdol district. The achievement of girls in reading comprehension varied from 28 per cent in Shahdol to 38 per cent in Raigarh. The difference between boys and girls in the reading comprehension score is statistically significant in Bilaspur. Boys are better than girls in the achievement in reading comprehension.

From the above discussion, it may be concluded that achievement of boys in word meaning lies between 39 to 52 per cent. The achievement of girls varies from 39.5 to 49 per cent in the Chhatisgarh region.

The achievement of boys in reading comprehension varied from 30 to 40 per cent. The achievement of girls ranged from 28 to 37 per cent in reading comprehension in Chhatisgarh region. Boys and girls differ significantly in Bilaspur in word meaning and reading comprehension. The boys are better than girls in the achievement.

Achievement in Language - Locationwise

Locationwise data on achievement in language is presented in Table 9.3. In word meaning the achievement of students from the urban area was significantly higher than the achievement of students from the rural area from the districts of Bilaspur, Raigarh, Sarguja. The same result was repeated for reading comprehension. The students from Shahdol showed the reverse trend.

Table 9.3: Mean Achievement of Class V Students in Language (Locationwise)

| Area | Districts | Rural | | Urban | | Signifi- cance |
|-------------------------------|-----------|-------|-------|-------|-------|-------------------|
| | | Mean | SD | Mean | SD | |
| Word Meaning | BPR | 17.40 | 09.66 | 19.48 | 08.51 | Yes |
| | RGH | 19.69 | 07.25 | 21.96 | 05.89 | Yes |
| | RNG | 17.20 | 08.68 | 18.28 | 08.34 | No |
| | SGJ | 17.39 | 08.37 | 19.93 | 06.92 | Yes |
| | SDL | 16.86 | 08.04 | 13.76 | 08.79 | Yes |
| Reading Compre- hension | BPR | 15.60 | 07.69 | 18.46 | 08.13 | Yes |
| | RGH | 15.57 | 05.79 | 17.25 | 05.78 | Yes |
| | RNG | 14.62 | 06.46 | 15.74 | 06.73 | No |
| | SGJ | 10.61 | 05.65 | 17.64 | 07.36 | Yes |
| | SDL | 12.86 | 06.10 | 11.64 | 06.41 | Yes |

Achievement in Language - Castewise

Means of achievement in word meaning and reading comprehension have been presented according to caste in Table 9.4. The achievement of SC varied from 34 per cent in Shahdol to 51 per cent in Raigarh. The achievement of ST ranged from 35 per cent in Shahdol to 49 per cent in Raigarh. The achievement of OBC varied from 40 per cent to 51 per cent in Raigarh. For Others the range varied from 46 per cent in Shahdol to 57 per cent in Raigarh.

Table 9.4: Mean Achievement of Class V Students in Language (Castewise)

| Area | Districts | SC | | ST | | OBC | | Others | |
|-----------------------|-----------|-------|-------|-------|-------|-------|-------|--------|-------|
| | | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Word Meaning | BPR | 16.91 | 09.75 | 16.61 | 08.73 | 17.92 | 09.48 | 20.45 | 08.98 |
| | RGH | 20.55 | 06.45 | 19.43 | 07.33 | 20.47 | 06.66 | 22.88 | 08.23 |
| | RNG | 18.37 | 07.73 | 15.88 | 08.44 | 17.54 | 08.69 | 18.55 | 08.82 |
| | SGJ | 16.60 | 07.60 | 16.62 | 09.33 | 19.59 | 06.97 | 19.98 | 06.27 |
| | SDL | 13.60 | 07.99 | 14.16 | 08.51 | 16.11 | 08.77 | 18.32 | 07.30 |
| Reading Comprehension | BPR | 15.22 | 07.96 | 14.44 | 06.34 | 15.74 | 07.98 | 18.96 | 08.29 |
| | RGH | 15.70 | 05.74 | 15.25 | 05.85 | 16.22 | 05.48 | 18.94 | 07.84 |
| | RNG | 16.15 | 05.16 | 14.53 | 05.58 | 14.78 | 06.63 | 16.63 | 08.43 |
| | SGJ | 14.20 | 07.03 | 10.61 | 07.09 | 13.97 | 06.13 | 17.24 | 08.07 |
| | SDL | 12.39 | 06.18 | 12.06 | 06.28 | 12.14 | 06.31 | 13.16 | 06.12 |

On comparing the result for significance of difference in the achievement of word meaning in all the four groups, it is revealed that difference is statistically significant between SC and Others in Bilaspur, Sarguja and Shahdol. Others are higher than SCs; OBCs are higher than STs in the district of Sarguja in the achievement in word meaning. Others are better than STs in the districts of Bilaspur, Sarguja and Shahdol. Others achieved higher than OBCs in the districts of Bilaspur and Shahdol.

The achievement in reading comprehension varied from 28 per cent in Shahdol to 36 per cent in Rajnandgaon for SC students. The achievement of ST students of Class V ranged from 24 per cent in Sarguja to 35 per cent in Raigarh. The students of Class V of OBC achieved from 28 per cent in Shahdol to 37 per cent in Raigarh. The achievement of Others in reading comprehension varied from 30 per cent in Shahdol to 43 per cent in Bilaspur.

Statistically there exists a difference in achievement of SC and Others in reading comprehension in Bilaspur. In the district Sarguja OBCs and STs differ in achievement. Others achieved higher in comprehension to STs in reading comprehension in the districts of Bilaspur, Rajnandgaon and Sarguja. Similarly, achievement of Others was higher than OBCs in the districts of Bilaspur and Sarguja.

Table 9.5: Levels of Significance of Class V Students in Language (Castewise)

| Area | Districts | SC & ST | SC & OBC | SC & Oth- ers | ST & OBC | ST & Others | OBC & Others |
|-------------------------------|-----------|---------------|----------------|------------------------|----------------|-------------------|--------------------|
| Word Meaning | BPR | No | No | Yes | No | Yes | Yes |
| | RGH | No | No | No | No | No | No |
| | RNG | No | No | No | No | No | No |
| | SGJ | No | No | Yes | Yes | Yes | No |
| | SDL | No | No | Yes | No | Yes | Yes |
| Reading Compre- hension | BPR | No | No | Yes | No | Yes | Yes |
| | RGH | No | No | No | No | Yes | No |
| | RNG | No | No | No | No | No | No |
| | SGJ | No | No | No | Yes | Yes | Yes |
| | SDL | No | No | No | No | No | No |

From the above discussion, it may be concluded that:

1. The achievement of students in language varied from 33 to 43 per cent. The mean achievement was the lowest in Shahdol.
2. Boys achieved higher than girls in word meaning and reading comprehension in all the districts.
3. Except Shahdol in all the other districts the achievement of students from urban areas was higher than the achievement of students from rural areas. In Shahdol the trend was reversed.
4. The achievement of Others was higher than SC, ST and OBC.

LEVELS OF ACHIEVEMENT IN LANGUAGE

The achievement scores in language were further analysed according to the level of achievement. The Language Achievement Test comprised of items based on competencies identified for Class IV. A competency may be tested by specifying the content input and designing a specific item. The assessment of learners' attainment is carried out on achieving the goal of mastery level. Naturally the achievement of children is to be divided into different levels. For the purpose of finding the achievement of Class V students the following levels were assumed for the baseline assessment study:

1. Zero level: The students securing zero mark in the language achievement test were called at zero level.
2. Not Achieving MLL: The students securing marks between zero but less than 40 per cent were called Not Achieving Minimum Level of Learning.
3. Achieving MLL: Students securing marks between 40 and 60 per cent were called as achieving Minimum Level of Learning.
4. Approaching Mastery Level: Students securing marks between 61 to 79 per cent were called Approaching Mastery Level.
5. Achieving Mastery Level: Students securing 80 per cent and above marks were called at Achieving Mastery Level

Table 9.6 shows the percentage of Class V students according to levels of achievement. About 4 per cent students were at zero level in Sarguja. The percentage of students Not Achieving MLL varied from 45.5 in Raigarh to 69 in Shahdol. In language the achievement of students of Class V is far from satisfaction between 46 to 69 per cent achieving marks below 40 per cent.

Table 9.6: Percentage of Class V Students on Different Levels of Achievement in Language

| Levels | Bilaspur | Raigarh | Rajnandgaon | Sarguja | Shahdol |
|---------------------|----------|---------|-------------|---------|---------|
| Zero | 01 90 | 01 00 | 00 70 | 03.90 | 00.20 |
| No MLL | 47.90 | 45 50 | 54 40 | 52.70 | 69.00 |
| Achieving MLL | 36 20 | 45 20 | 37.40 | 37.30 | 27 30 |
| Approaching Mastery | 13.10 | 08 40 | 06 70 | 05.80 | 03 20 |
| Achieving Mastery | 01.00 | 01 00 | 00.80 | 00.30 | 00.20 |

The percentage of students Achieving MLL varied from 27.3 in Shahdol to 45.2 in Raigarh. This shows that between 27 to 45 per cent students of Class V achieved between 40 to 60 per cent. The percentage of students Approaching Mastery varied from 3 2 in Shahdol to 13.1 in Bilaspur. This shows that less than eight per cent students of Class V achieved score between 61 to 79 per cent in four districts

Only one per cent of students were at Achieving Mastery Level in Bilaspur and Raigarh. In Rajnandgaon, Sarguja and Shahdol less than one per cent students were in this category.

From the above presentation, it may be concluded that more than 50 per cent of students of Class V from districts Rajnandgaon, Sarguja and Shahdol achieved less than 40 per cent in language.

Levels of Achievement - Genderwise

A glance at Table 9.7 reveals that the percentage of students of Class V at zero level varied from 3.3 in Raigarh to 9.5 in Bilaspur in word meaning. The percentage of boys at zero level varied from 3.5 in Raigarh to 7 in Shahdol. The percentage of girls at zero level ranged from 3.2 in Raigarh to 12.9 in Bilaspur. This shows that more girls were at zero level in word meaning than boys

The percentage of students of Class V at Not Achieving MLL varied from 15.7 in Raigarh to 34.2 in Shahdol. About 11 to 35 per cent boys belonged to this category. The percentage of girls Not Achieving MLL ranged from 19.2 in Raigarh to 33.3 in Shahdol in word meaning

The percentage of students achieving MLL varied from 40.7 in Bilaspur to 53.5 in Raigarh. In this group boys were found to be from 45.6 per cent in Bilaspur to 56.1 per cent in Sarguja. The girls in this group were from 35.4 per cent in Bilaspur to 50.6 per cent in Raigarh. More boys were found in this category than girls in the Chhatisgarh region.

Table 9.7: Percentage of Class V Students on Different Levels of Achievement in Language (Genderwise)

| Area | Levels | Bilaspur | | | Raigarh | | | Rayrandgaon | | |
|-----------------------|---------------------|----------|-------|-------|---------|-------|-------|-------------|-------|-------|
| | | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Word Meaning | Zero | 06.20 | 12.90 | 09.50 | 03.50 | 03.20 | 03.30 | 05.90 | 11.20 | 08.50 |
| | No MLL | 21.80 | 28.90 | 25.20 | 11.90 | 19.20 | 15.70 | 26.50 | 24.40 | 25.50 |
| | Achieving MLL | 45.60 | 35.40 | 40.70 | 56.60 | 50.60 | 53.50 | 46.40 | 43.60 | 45.00 |
| | Approaching Mastery | 22.30 | 19.60 | 21.70 | 25.20 | 26.90 | 26.10 | 20.30 | 19.10 | 19.70 |
| | Achieving Mastery | 04.10 | 03.10 | 03.60 | 02.80 | 00.00 | 01.30 | 01.00 | 01.70 | 01.30 |
| Reading Comprehension | Zero | 01.40 | 07.00 | 04.10 | 00.00 | 01.30 | 00.70 | 03.90 | 01.40 | 02.50 |
| | No MLL | 50.10 | 56.10 | 53.00 | 60.80 | 60.90 | 60.90 | 26.20 | 65.30 | 60.80 |
| | Achieving MLL | 32.90 | 21.20 | 27.20 | 30.10 | 29.50 | 29.80 | 32.40 | 23.80 | 28.10 |
| | Approaching Mastery | 13.40 | 15.00 | 14.20 | 07.70 | 07.70 | 07.70 | 06.20 | 08.90 | 07.60 |
| | Achieving Mastery | 02.20 | 00.80 | 01.50 | 01.40 | 00.60 | 01.00 | 01.30 | 01.00 | 01.10 |

(Contd. on the next page)

Table 9.7: Percentage of Class V Students on Different Levels of Achievement in Language (Genderwise)

| Area | Levels | Sarguja | | | Shahdol | | |
|-----------------------|---------------------|---------|-------|-------|---------|-------|-------|
| | | Boys | Girls | Total | Boys | Girls | Total |
| Word Meaning | Zero | 06.70 | 06.70 | 06.40 | 07.00 | 10.20 | 08.40 |
| | No MLL | 17.10 | 27.60 | 21.90 | 34.90 | 33.30 | 34.20 |
| | Achieving MLL | 56.10 | 46.20 | 51.40 | 45.90 | 40.70 | 43.70 |
| | Approaching Mastery | 18.90 | 19.30 | 19.30 | 11.40 | 14.10 | 12.60 |
| | Achieving Mastery | 01.20 | 00.70 | 01.00 | 00.90 | 01.70 | 01.20 |
| Reading Comprehension | Zero | 06.10 | 09.00 | 07.40 | 02.20 | 06.20 | 03.90 |
| | No MLL | 64.60 | 60.00 | 62.40 | 76.00 | 74.00 | 75.10 |
| | Achieving MLL | 23.20 | 21.40 | 22.50 | 19.20 | 13.00 | 16.50 |
| | Approaching Mastery | 06.10 | 07.60 | 07.80 | 02.60 | 06.80 | 04.40 |
| | Achieving Mastery | 00.00 | 02.10 | 01.00 | 00.00 | 00.00 | 00.00 |

The percentage of students Approaching Mastery Level varied from 12.6 in Shahdol to 26.1 in Raigarh. Boys were placed in this category from 11.4 per cent in Shahdol to 25.2 per cent in Raigarh. Girls got this group from 14.1 per cent in Shahdol to 26.9 per cent in Raigarh. More boys were found in this group than girls.

The percentage of students of Class V Achieving Mastery Level varied from 1.0 in Sarguja to 3.6 in Bilaspur. More boys were found in this group than girls. This shows that in four districts about one per cent students achieved mastery level in word meaning.

More girls were on zero level and Not Achieving MLL in word meaning section of the Language Achievement Test. More boys were on Achieving MLL, Approaching Mastery Level and Achieving Mastery Level in the word meaning section of the language.

In the reading comprehension section of LAT the percentage of Class V students at zero level varied from 0.7 in Raigarh to 7.4 in Sarguja. More girls were in this category than boys in all the districts except in Sarguja. In Sarguja 12 per cent boys were at this level in comparison to 0.7 per cent of girls.

The percentage of Class V students Not Achieving MLL in reading comprehension of LAT varied from 53 in Bilaspur to 75.1 in Shahdol. More girls were at higher level than boys in all the districts.

The percentage of students of Class V Achieving MLL varied from 16.5 in Shahdol to 27.8 in Raigarh. More boys were at this level in all the districts than girls.

The percentage of students Approaching Mastery Level varied from 4.4 in Shahdol to 14.2 in Bilaspur. More girls were at this level than boys in all the districts.

The percentage of students Achieving Mastery Level ranged from zero in Shahdol to 1.5 in Bilaspur.

It may be safely concluded that more than 60 per cent students had not achieved even 40 per cent in reading comprehension of LAT. About 10 per cent students of Class V were at Approaching Mastery Level and had achieved below 80 per cent.

Levels of Achievement - Locationwise

The percentage of Class V students achieving different levels according to rural and urban areas is presented in Table 9.8.

In the word meaning section of LAT, the percentage of students of rural areas at zero level varied from 4.5 in Raigarh to 10.8 in Bilaspur. More students of rural areas were at this level than students of urban areas in all the districts except Shahdol. In Shahdol more students (10.1%) of urban areas were at this level than students (7.5%) of rural areas.

More students of rural areas were at Not Achieving MLL than students of urban areas in all the districts except Shahdol. In Shahdol more students (46%) of urban areas were at this level than students (28.1%) of rural areas.

More students from urban areas were at the level of Achieving MLL than students from rural areas in all the districts except Shahdol. In Shahdol more students (49.4%) from rural areas were at this level than students (32.4%) from urban areas.

More students of Class V from urban areas of Bilaspur, Raigarh and Sarguja were at the level of Approaching Mastery than students from rural areas. While in Rajnandgaon and Shahdol, more students from rural areas were at this level than students from urban areas.

Table 9.8: Percentage of Class V Students on Different Levels of Achievement in Language (Locationwise)

| Area | Levels | Bilaspur | | Rangarh | | Raynandgaon | | Sarguja | | Shekhdol | |
|-----------------------|---------------------|----------|-------|---------|-------|-------------|-------|---------|-------|----------|-------|
| | | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| Word Meaning | Zero | 10.80 | 05.50 | 04.50 | 00.00 | 09.60 | 05.60 | 09.60 | 01.60 | 07.50 | 10.10 |
| | No MLL | 27.00 | 20.20 | 17.60 | 10.30 | 26.30 | 23.10 | 21.90 | 21.80 | 28.10 | 46.00 |
| | Achieving MLL | 39.30 | 44.80 | 52.90 | 55.10 | 43.40 | 49.40 | 50.30 | 53.20 | 49.40 | 32.40 |
| | Approaching Mastery | 18.80 | 27.60 | 23.50 | 33.30 | 20.30 | 18.10 | 17.60 | 21.80 | 13.10 | 11.50 |
| | Achieving Mastery | 04.20 | 02.00 | 01.40 | 01.30 | 00.40 | 03.80 | 00.50 | 01.60 | 01.90 | 00.00 |
| Reading Comprehension | Zero | 05.20 | 01.00 | 00.90 | 00.00 | 03.10 | 00.60 | 11.80 | 00.80 | 04.10 | 03.60 |
| | No MLL | 55.60 | 45.30 | 63.80 | 52.60 | 60.40 | 61.90 | 74.30 | 44.40 | 73.40 | 78.40 |
| | Achieving MLL | 26.60 | 29.10 | 27.60 | 25.90 | 29.00 | 25.60 | 13.40 | 36.30 | 18.00 | 13.70 |
| | Approaching Mastery | 11.60 | 21.70 | 06.80 | 10.30 | 06.90 | 09.40 | 00.50 | 16.10 | 04.50 | 04.30 |
| | Achieving Mastery | 01.00 | 03.00 | 00.90 | 01.30 | 00.70 | 02.50 | 00.00 | 02.40 | 00.00 | 00.00 |

The analysis of data in terms of Reading Comprehension depicts that a small percentage of students of Class V were at zero level. On the other hand, a very small percentage of students were at the Achieving Mastery Level.

Overall, the achievement of students of Class V was higher in Word Meaning than the achievement of students in Reading Comprehension in rural and urban areas of all the districts.

In Reading Comprehension the highest number of students were at Not Achieving MLL. Their achievement in Reading Comprehension was between zero and 40 per cent. The percentage of students from rural areas Not Achieving MLL varied from a low of 55.6 in Bilaspur to a high of 78 in Shahdol. The percentage of students of urban areas Not Achieving MLL was lower in all the districts in comparison to the students from rural areas. The percentage of students from urban areas Not Achieving MLL varied from a low of 44.4 in Sarguja to a high of 78.4 in Shahdol.

About one-fourth students from rural and urban areas of Bilaspur, Raigarh and Rajnandgaon were at the level of Achieving MLL in Reading Comprehension. In Sarguja more students of urban areas (36%) were at this level than students from rural areas (13%).

A clear-cut distribution is visible in the students from rural and urban areas in the Approaching Mastery Level. More students of urban areas were at this level than the students from rural areas in all the districts except Shahdol. In Shahdol the percentage of students from rural and urban area was almost same at this level.

In Shahdol no student was found on Achieving Mastery Level. In all other districts less than three per cent students were at this level.

Level of Achievement - Castewise

The percentage of students on different levels of achievement is shown in Table 9.9.

A clear trend is not visible among the students of different castes in different districts who were at zero level in Word Meaning. In Bilaspur about 10 per cent students of SC, ST and OBC were at zero level in comparison to five per cent OBC students. In Raigarh, about five per cent students of ST and Others were at zero level in comparison to SC (3%) and OBC (1%) students. In Sarguja no student of Others was found at zero level in Word Meaning. The highest percentage of students who were at zero level in Word Meaning was of ST from Sarguja (15%) and SC of Shahdol (14%).

The percentage of students at the level of Not Achieving MLL in Word Meaning ranged from a low of 20 for Others to a high of 30 for SCs in Bilaspur. In Raigarh no student of Others was found in this category. All other caste students - SC, ST and OBC - were at Not Achieving MLL and this percentage varied between 14 to 18.

Table 9.9: Percentage of Class V Students on Different Levels of Achievement in Language (Castewise)

| Area | Levels | Bilaspur | | | | Raugarh | | | | Rajnandgaon | | | |
|-----------------------|---------------------|----------|-------|-------|--------|---------|-------|-------|--------|-------------|-------|-------|--------|
| | | SC | ST | OBC | Others | SC | ST | OBC | Others | SC | ST | OBC | Others |
| Word Meaning | Zero | 10.10 | 11.10 | 09.90 | 05.60 | 02.90 | 06.20 | 01.40 | 05.60 | 05.70 | 11.30 | 08.70 | 05.30 |
| | No MLL | 29.80 | 25.90 | 24.80 | 20.20 | 14.70 | 15.20 | 18.20 | 00.00 | 26.40 | 25.40 | 24.80 | 31.60 |
| | Achieving MLL | 38.70 | 48.10 | 40.10 | 38.70 | 50.00 | 56.60 | 52.70 | 50.00 | 52.80 | 50.70 | 44.10 | 34.20 |
| | Approaching Mastery | 16.70 | 13.90 | 21.50 | 31.50 | 32.40 | 22.20 | 25.70 | 38.90 | 15.10 | 12.70 | 20.80 | 26.30 |
| | Achieving Mastery | 04.80 | 00.90 | 03.70 | 00.60 | 00.00 | 00.00 | 02.00 | 05.60 | 00.00 | 00.00 | 01.60 | 02.60 |
| Reading Comprehension | Zero | 04.20 | 03.70 | 05.20 | 00.80 | 02.90 | 01.00 | 00.00 | 00.00 | 00.00 | 00.00 | 03.40 | 00.00 |
| | No MLL | 57.70 | 64.80 | 51.70 | 40.30 | 55.90 | 67.70 | 59.50 | 44.40 | 56.60 | 71.80 | 60.20 | 52.60 |
| | Achieving MLL | 23.80 | 23.10 | 28.00 | 33.10 | 32.40 | 23.20 | 32.40 | 38.90 | 35.80 | 21.10 | 28.20 | 28.90 |
| | Approaching Mastery | 12.50 | 08.30 | 13.10 | 25.00 | 08.80 | 07.10 | 08.10 | 05.60 | 07.50 | 07.00 | 07.20 | 13.20 |
| | Achieving Mastery | 01.80 | 00.00 | 02.00 | 00.80 | 00.00 | 01.00 | 00.00 | 11.10 | 00.00 | 00.00 | 01.10 | 05.30 |

Table 9.9: Percentage of Class V Students on Different Levels of Achievement in Language (Castewise)

| Area | Levels | Sarguja | | | | Shahdol | | | |
|-----------------------|---------------------|---------|-------|-------|--------|---------|-------|-------|--------|
| | | SC | ST | OBC | Others | SC | ST | OBC | Others |
| Word Meaning | Zero | 08.00 | 15.10 | 01.60 | 00.00 | 14.30 | 09.70 | 09.60 | 03.10 |
| | No MLL | 36.00 | 22.60 | 19.00 | 20.40 | 35.70 | 43.80 | 29.60 | 26.50 |
| | Achieving MLL | 44.00 | 42.50 | 57.10 | 59.30 | 46.40 | 36.80 | 45.20 | 50.00 |
| | Approaching Mastery | 12.00 | 18.90 | 20.60 | 20.40 | 03.60 | 08.30 | 14.10 | 19.40 |
| | Achieving Mastery | 00.00 | 00.90 | 01.60 | 00.0 | 00.00 | 01.40 | 01.50 | 01.00 |
| Reading Comprehension | Zero | 08.00 | 16.00 | 02.40 | 01.90 | 00.00 | 03.50 | 05.20 | 04.10 |
| | No MLL | 64.00 | 67.90 | 65.10 | 44.40 | 78.60 | 75.00 | 77.80 | 70.40 |
| | Achieving MLL | 20.00 | 12.30 | 25.40 | 37.00 | 17.90 | 17.40 | 11.90 | 21.40 |
| | Approaching Mastery | 04.00 | 03.80 | 07.10 | 13.00 | 03.60 | 04.20 | 05.20 | 04.10 |
| | Achieving Mastery | 04.00 | 00.00 | 00.00 | 03.70 | 00.00 | 00.00 | 00.00 | 00.00 |

About 40 per cent students of all castes were at the level of Achieving MLL in Bilaspur. In Raigarh about 50 per cent students of all castes were at this level in Word Meaning. In Rajnandgaon, the percentage of students varied from 34 for Others to 53 for SCs in Word Meaning. In Sarguja the percentage of students at Achieving Mastery Level varied from a low of 42 of STs to a high of 59 for Others in Word Meaning

A sharp distinction is visible among the students of different castes in Approaching Mastery Level in Word Meaning. In Bilaspur in comparison to 17 per cent of STs, 32 per cent Others were at Approaching Mastery Level. In Raigarh 39 per cent students of Others were at this level in comparison to 22 per cent of ST students. In Sarguja students of OBC and Others were at this level in the same proportion (20%). In Shahdol a wide gap existed among the students of various castes. Four per cent of SC students were at Approaching Mastery Level in comparison to 19 per cent students of Others.

The percentage of students at Achieving Mastery Level in Word Meaning varied from zero to five in all the districts of all castes.

From the above discussion, it may be concluded that:

1. There are students in Class V whose achievement is zero in language Hindi in the Hindi speaking area.
2. The percentage of students Not Achieving MLL lies between 46 to 49. They have achieved a score between one and 39 per cent.
3. About 27 to 45 per cent students scored between 40 to 59 per cent. They were at Achieving MLL.
4. Less than 10 per cent students were at Approaching Mastery Level. Their achievement was between 60 to 79 per cent.
5. Less than one per cent students were at Achieving Mastery Level. They achieved score above 80 per cent.
6. The achievement of students was higher in Word Meaning than Reading Comprehension.
7. More girls than boys were at Approaching Mastery Level and Achieving Mastery Level.
8. More students of urban areas than rural areas were at Approaching Mastery Level and Achieving Mastery Level.
9. Clear achievement levels were visible in different castes in a district but a pattern did not emerge.
10. The teaching of language should be improved in all the schools

ACHIEVEMENT IN MATHEMATICS

The students of Class V were tested in competencies to be achieved by them when they studied in Class IV. The Mathematics Achievement Test (MAT) comprised 40 items. Each item was scored for one mark. Thus the total score of MAT was 40.

Table 9.10 presents the achievement of Class V students in mathematics. The overall achievement of students in Chhatisgarh region was below 30 per cent.

Table 9.10: Mean Achievement of Class V Students in Mathematics

| Districts | N | Mean | SD |
|-----------|------|------------------|-------|
| BPR | 807 | 12.59 (31.47) | 05.65 |
| RGH | 299 | 12.88 (32.20) | 04.22 |
| RNG | 609 | 11.73 (29.32) | 04.44 |
| SGJ | 311 | 10.03 (25.07) | 04.59 |
| SDL | 406 | 10.59 (26.47) | 04.55 |
| Total | 2432 | 11.65 (29.13) | 04.70 |

** Figures in parenthesis indicate percentage*

The highest mean achievement in MAT was 12.88 in Raigarh. The mean achievement was 32 per cent. The SD was 4.22. This indicated less variation in the district. The lowest mean achievement in MAT was 10.03 in Sarguja. The mean achievement was 25 per cent of total scores. The SD is 4.59.

The mean achievement in other three districts was 12.59 in Bilaspur, 11.73 in Rajnandgaon and 10.59 in Shahdol.

Achievement in Mathematics - Genderwise

The mean achievement of students in five districts is presented in Table 9.11, according to gender.

Table 9.11: Mean Achievement of Class V Students in Mathematics (Genderwise)

| Districts | Boys | | Girls | | Significance |
|-----------|-------|-------|-------|-------|--------------|
| | Mean | SD | Mean | SD | |
| BPR | 12.99 | 05.17 | 12.14 | 06.09 | Yes |
| RGH | 12.72 | 04.07 | 13.02 | 04.35 | No |
| RNG | 12.10 | 04.65 | 11.35 | 04.17 | Yes |
| SGJ | 10.37 | 04.37 | 09.67 | 04.85 | No |
| SDL | 11.10 | 04.15 | 09.93 | 04.95 | Yes |

It is evident from Table 9.11 that the mean achievement of boys was higher than that of girls in all the districts except in Raigarh. In Raigarh the mean achievement of girls was higher than that of boys in MAT.

The mean achievement of boys varied from a low of 10.37 in Sarguja to a high of 12.99 in Bilaspur. The mean achievement of girls ranged from a low of 9.67 in Sarguja to a high of 13.07 in Raigarh. The highest mean achievement of boys was coupled with the highest SD in Bilaspur. This shows that more variation existed in the achievement of boys in Bilaspur. The mean achievement of girls was 12.14 with 6.09 SD in Bilaspur. This again indicated that more variation was in the achievement of girls.

The achievement of boys and girls in mathematics was compared. The boys achieved significantly higher than girls in Bilaspur, Shahdol and Rajnandgaon.

Though the achievement of girls was higher than boys in district Raigarh, the difference was not statistically significant.

Achievement in Mathematics - Locationwise

The locationwise achievement of students of Class V is presented in Table 9.12. The mean achievement of students from urban areas was higher than that of students from rural areas in all the districts except Shahdol. In Shahdol the achievement of students of rural areas was higher than that of students from urban areas.

Table 9.12: Mean Achievement of Class V Students in Mathematics (Locationwise)

| Districts | Rural | | Urban | | Signifi- cance |
|-----------|-------|-------|-------|-------|-------------------|
| | Mean | SD | Mean | SD | |
| BPR | 11.96 | 05.79 | 14.43 | 04.75 | Yes |
| RGH | 12.71 | 03.98 | 13.35 | 04.82 | No |
| RNG | 11.47 | 04.32 | 12.45 | 04.68 | Yes |
| SGJ | 09.11 | 04.51 | 11.43 | 04.39 | Yes |
| SDL | 10.94 | 04.56 | 09.92 | 04.48 | Yes |

The mean achievement of students of rural areas varied from a low of 9.11 in Sarguja to a high of 12.71 in Raigarh. In urban areas, the mean achievement of students ranged from 9.92 in Shahdol to 14.43 in Bilaspur.

The mean achievement of students from rural areas of Bilaspur was 11.96 with SD 5.79. This indicated that a wide variation existed in the achievement score.

The mean achievement of students from rural and urban areas was compared for significance. It was noted that the mean achievement of students from urban areas was significantly higher than that of students from rural areas in Bilaspur, Rajnandgaon and Sarguja. In Shahdol the mean achievement of students from rural areas was significantly higher than that of students from urban areas.

Achievement in Mathematics - Castewise

Castewise mean achievement of students in mathematics is given in Table 9.13. The mean achievement of Others was higher than SC, ST and OBC in all the districts except Shahdol. In Shahdol the mean achievement of SC students was the highest in comparison to other castes students.

Table 9.13: Mean Achievement of Class V Students in Mathematics (Castewise)

| Districts | SC | | ST | | OBC | | Others | |
|-----------|-------|-------|-------|-------|-------|-------|--------|-------|
| | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| BPR | 11.50 | 05.45 | 11.60 | 04.34 | 12.55 | 05.74 | 15.03 | 05.88 |
| RGH | 12.32 | 03.61 | 12.49 | 04.01 | 12.81 | 04.26 | 13.61 | 04.48 |
| RNG | 12.35 | 04.77 | 10.16 | 03.97 | 11.82 | 04.33 | 12.71 | 05.34 |
| SGJ | 09.64 | 04.42 | 08.91 | 05.03 | 10.36 | 04.18 | 11.65 | 04.23 |
| SDL | 11.60 | 04.70 | 10.59 | 04.93 | 10.16 | 04.21 | 10.86 | 04.37 |

The mean achievement of SC students varied from a low of 9.64 in Sarguja to a high of 12.35 in Rajnandgaon. For ST students the mean achievement ranged from 8.91 in Sarguja to 11.60 in Bilaspur. The mean achievement of OBC students varied from a low of 10.16 in Shahdol to a high of 12.81 in Raigarh. For Others the mean achievement ranged from 10.86 in Shahdol to 15.03 in Bilaspur.

The mean achievement of students was compared castewise. The results are presented in Table 9.14.

Table 9.14: Levels of Significance of Class V Students in Mathematics (Castewise)

| Districts | SC & ST | SC & OBC | SC & Others | ST & OBC | ST & Others | OBC & Others |
|-----------|---------|----------|-------------|----------|-------------|--------------|
| BPR | No | Yes | Yes | No | Yes | Yes |
| RGH | No | No | Yes | No | Yes | Yes |
| RNG | Yes | No | No | Yes | Yes | No |
| SGJ | No | No | No | Yes | Yes | No |
| SDL | No | No | No | No | No | No |

The mean achievement of Others was significantly higher than that of SC, ST and OBC students in the districts of Bilaspur and Raigarh. In Rajnandgaon the mean achievement of SC students was significantly higher than that of ST students. In Rajnandgaon and Sarguja the mean achievement of ST students was significantly lower than that of students of Others and OBCs

From the above discussion, it may be concluded that:

1. The mean achievement of students in mathematics is low (less than 33%).
2. The achievement of boys was significantly higher than that of girls in the districts of Bilaspur, Rajnandgaon and Shahdol.
3. The students of urban areas achieved significantly higher than the students of rural areas in the districts of Bilaspur, Rajnandgaon and Sarguja
4. The achievement of Others was higher than the achievement of SC, ST and OBC students.
5. The teaching of mathematics need drastic improvement in all the districts.

LEVELS OF ACHIEVEMENT IN MATHEMATICS

The five levels of achievement were also determined to find out the percentage of students. The data is presented in Table 9.15.

It is evident from Table 9.15 that less than five per cent students were at zero level in the four districts of Bilaspur, Rajnandgaon, Sarguja and Shahdol. In Raigarh no student was found at zero level.

The percentage of students achieving marks between one and 39 per cent varied from 74 in Bilaspur to 90 in Shahdol. The percentage of students achieving marks above 40 but less than 59 ranged from 8 in Shahdol to 21 in Raigarh. Less than two per cent students achieved marks above 60 per cent. In Raigarh, Rajnandgaon, Sarguja and Shahdol no student achieved more than 80 per cent marks in mathematics.

Levels of Achievement - Genderwise

The genderwise levels of achievement are also given in Table 9.15.

More girls were at zero level than boys in the districts of Bilaspur, Sarguja and Shahdol. In Approaching Mastery Level, more girls were at this level than boys in the districts of Raigarh and Shahdol. More girls than boys were at Approaching Mastery Level in Bilaspur.

Table 9.15: Percentage of Class V Students on Different Levels of Achievement in Mathematics (Genderwise)

| Levels | Bilaspur | | | Raigarh | | | Rajnandgaon | | |
|---------------------|----------|-------|-------|---------|-------|-------|-------------|-------|-------|
| | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Zero | 00.20 | 07.50 | 03.70 | 00.00 | 00.00 | 00.00 | 01.30 | 01.30 | 01.30 |
| No MLL | 77.50 | 70.80 | 74.30 | 83.20 | 73.70 | 78.30 | 81.40 | 88.80 | 85.10 |
| Achieving MLL | 19.90 | 18.90 | 19.40 | 15.40 | 26.30 | 21.10 | 15.70 | 08.90 | 12.30 |
| Approaching Mastery | 01.70 | 02.30 | 02.00 | 01.40 | 00.00 | 00.70 | 01.60 | 01.00 | 01.30 |
| Achieving Mastery | 00.70 | 00.50 | 00.60 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| Levels | Sarguja | | | Shahdol | | | | | |
| | Boys | Girls | Total | Boys | Girls | Total | | | |
| Zero | 03.70 | 06.20 | 04.80 | 00.90 | 04.50 | 02.50 | | | |
| No MLL | 87.80 | 84.10 | 86.20 | 90.00 | 89.30 | 89.70 | | | |
| Achieving MLL | 08.50 | 09.70 | 09.00 | 09.20 | 05.60 | 07.60 | | | |
| Approaching Mastery | 00.00 | 00.00 | 00.00 | 00.00 | 00.60 | 00.20 | | | |
| Achieving Mastery | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | | | |

Levels of Achievement - Locationwise

The levels of achievement according to location is presented in Table 9.16. More students from rural areas were at zero level than students from urban areas in Bilaspur and Rajnandgaon.

Table 9.16: Percentage of Class V Students on Different Levels of Achievement in Mathematics (Locationwise)

| Levels | Bilaspur | | Raigarh | | Rajnandgaon | |
|---------------------|----------|-------|---------|-------|-------------|-------|
| | Rural | Urban | Rural | Urban | Rural | Urban |
| Zero | 04.80 | 00.50 | 00.00 | 00.00 | 01.60 | 00.60 |
| No MLL | 76.70 | 67.00 | 82.80 | 65.40 | 86.00 | 82.50 |
| Achieving MLL | 15.30 | 31.50 | 16.30 | 34.60 | 11.60 | 14.40 |
| Approaching Mastery | 02.30 | 01.0 | 00.90 | 00.00 | 00.90 | 02.50 |
| Achieving Mastery | 00.80 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| Levels | Sarguja | | Shahdol | | | |
| | Rural | Urban | Rural | Urban | | |
| Zero | 08.00 | 00.00 | 01.50 | 04.30 | | |
| No MLL | 88.00 | 82.30 | 88.80 | 91.40 | | |
| Achieving MLL | 03.20 | 17.70 | 09.70 | 03.60 | | |
| Approaching Mastery | 00.00 | 00.00 | 00.00 | 00.70 | | |
| Achieving Mastery | 00.00 | 00.00 | 00.00 | 00.00 | | |

In Bilaspur, Raigarh, Rajnandgaon and Sarguja more students from rural areas were at the level of Not Approaching Mastery Level while in Shahdol more students from urban areas were at this level.

More students from urban areas were at Approaching Mastery Level in all the districts. The percentage of rural students at this level varied from a low of 3.2 in Sarguja to a high of 16.3 in Raigarh. The percentage of urban students at this level ranged from 3.6 in Shahdol to 31.5 in Bilaspur.

In all the districts, except Bilaspur, students were not at Achieving Mastery Level. In Bilaspur, no student was found in the urban area on this level.

Levels of Achievement - Castewise

Castewise levels of achievement are presented in Table 9.17.

The zeros at many places in Table 9.17 indicate that no student from that caste belong to the level.

The percentage of students of Others was the highest in all the districts except Sarguja and Shahdol at Approaching Mastery Level. Similarly, the highest number of students were at this level in Bilaspur. In all the other districts no student was found at this level in any caste.

The percentage of students at the level of Achieving Mastery was the highest for Others in all the districts except Shahdol. In Shahdol about 9 per cent students were at this level. In the four districts the percentage of students varied from 18.5 in Sarguja to 55.6 in Raigarh.

The highest percentage of students were at Not Approaching MLL for all castes in all the districts. The percentage of SC students at this level varied from a low of 76 in Bilaspur to a high of 89.3 in Shahdol. The students of ST in terms of percentage at this level ranged from 86 in Shahdol to 90 in Rajnandgaon. The OBC students achieving marks between one and 39 varied from a low of 74.8 in Bilaspur to 93.3 in Shahdol. Finally, the percentage of Other students Not Achieving MLL ranged from a low of 58.9 in Bilaspur to a high of 89.8 in Shahdol. In comparison to SC, ST and OBC students, the percentage of Others was the lowest in Not Achieving MLL.

From the above discussion, it may be concluded that:

1. Less than four per cent students achieved zero in mathematics
2. More than three-fourth students achieved between one and 39 per cent marks in mathematics.
3. The percentage of students achieving marks between 40 and 59 per cent varied from a low of 7 in Shahdol to a high of 21 in Raigarh.
4. Less than 2 per cent students scored between 60 and 79 per cent in mathematics
5. Only in Bilaspur less than one per cent students achieved marks between 80 per cent and above

Table 9.17: Percentage of Class V Students on Different Levels of Achievement in Mathematics (Castewise)

| Levels | Bilaspur | | | | Rajgarh | | | | Rajnandgaon | | | |
|---------------------|----------|-------|-------|--------|---------|-------|-------|--------|-------------|-------|-------|--------|
| | SC | ST | OBC | Others | SC | ST | OBC | Others | SC | ST | OBC | Others |
| Zero | 05.40 | 00.90 | 04.20 | 02.40 | 00.00 | 00.00 | 00.00 | 00.00 | 01.90 | 04.20 | 00.90 | 00.00 |
| No MLL | 76.20 | 87.00 | 74.80 | 58.90 | 88.20 | 80.80 | 79.10 | 38.90 | 81.10 | 90.10 | 85.70 | 73.70 |
| Achieving MLL | 17.30 | 12.00 | 17.60 | 34.70 | 11.80 | 19.20 | 20.30 | 55.60 | 13.20 | 05.60 | 12.30 | 23.70 |
| Approaching Mastery | 01.20 | 00.00 | 02.70 | 02.40 | 00.00 | 00.00 | 00.70 | 05.60 | 03.80 | 00.00 | 01.10 | 02.60 |
| Achieving Mastery | 00.00 | 00.00 | 00.70 | 01.60 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 |
| Levels | Sarguja | | | | Shahdol | | | | | | | |
| | SC | ST | OBC | Others | SC | ST | OBC | Others | | | | |
| Zero | 00.00 | 12.30 | 01.60 | 00.00 | 00.00 | 03.50 | 03.00 | 01.00 | | | | |
| No MLL | 92.00 | 82.10 | 90.50 | 81.50 | 89.30 | 86.10 | 93.30 | 89.80 | | | | |
| Achieving MLL | 08.00 | 05.70 | 07.90 | 18.50 | 10.70 | 10.40 | 03.00 | 09.20 | | | | |
| Approaching Mastery | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.70 | 00.00 | | | | |
| Achieving Mastery | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | | | | |

6. The percentage of boys Achieving MLL was higher than the percentage of girls at this level in the districts of Bilaspur, Rajnandgaon and Shahdol. In Raigarh and Sarguja the percentage of girls was higher than the percentage of boys.
7. More percentage of students from urban areas were at Achieving MLL than the students from rural areas in all the districts except Shahdol. In Shahdol the percentage of rural students at this level was higher than that of students of urban areas.
8. Castewise, the percentage of Others at Achieving MLL was higher than the percentage of students from SC, ST and OBC at this level in all the districts except Shahdol. In Shahdol, more percentage of SC students were at this level than the students of ST, OBC and Others categories.

RELATIONSHIP BETWEEN ACHIEVEMENT IN MATHEMATICS AND LANGUAGE

The relationship between achievement in mathematics and language was studied. The coefficient of correlation was studied. The language test was divided into following different components:

1. *Word Meaning*
 - (a) Antonyms (WMA)
 - (b) Synonyms (WMS)
2. *Reading Comprehension*
 - (a) Factual Details (RCF)
 - (b) Inference (RCI)
 - (c) Title/Central Idea (RCC)

In language, six variabls were identified for establishing correlation with the scores of mathematics. Word Meaning and Reading Comprehension were two main divisions of the language.

The coefficient of correlation between achievement in word meaning and achievement in mathematics is 0.52 in Bilaspur. The value of 'r' (coefficient of correlation) is significant beyond 0.01 level. This shows that achievement in word meaning is highly positively correlated with the achievement in mathematics. The same result is true for Raigarh and Sarguja. In these two districts the value of 'r' is significant at 0.01 level. For the students of Rajnandgaon and Shahdol the value of 'r' is significant at 0.05 level. This shows that there existed a postive relationship between these two variables.

The achievement in word meaning was comprised of achievement scores of antonyms and synonyms. Accordingly two variables were identified as word meaning antonyms and word meaning synonyms. The correlations were calculated by taking one at a time with the achievement score in mathematics.

Table 9.18: Correlation Between Achievement in Mathematics and Language

| Language Variable | BPR | RGH | RNG | SGJ | SDL |
|---|-------|-----------|-----------|-----------|-----------|
| Word Meaning Total (TOT1) | .52** | .25** | .20* | .37** | .21* |
| Word Meaning Antonyms (WMA) | .50** | .20* | .19* | .42** | .24** |
| Word Meaning Synonyms (WMS) | .50** | .27** | .23** | .40** | .19* |
| Reading Comprehension Total (TOT2) | .62** | .44** | .23** | .43** | .42** |
| Reading Comprehension of Factual Detail (RCF) | .63** | .45** | .25** | .49** | .41** |
| Reading Comprehension of Inferences (RCI) | .59** | .27** | .19* | .38** | .31** |
| Reading Comprehension of Title/Central Idea (RCC) | .20** | .06 NS | .03 NS | .17 NS | .11 NS |

**** Significant at 01 level**

*** Significant at 05 level**

NS Not Significant

The correlation coefficient 'r' between achievement in word meaning antonyms (WMA) and achievement in mathematics was 0.50 for students of Bilaspur. The value of 'r' is significant at 0.01 level. The value of 'r' is also significant at 0.01 level for the students of Sarguja and Shahdol.

For the students of Raigarh and Rajnandgaon the value of 'r' is significant at 0.05 level. The correlation between achievement in mathematics and achievement in word meaning synonyms (WMS) was significant at 0.01 level for the districts of Bilaspur, Raigarh, Rajnandgaon, and Sarguja. The coefficient of correlation between achievement in mathematics and WMS was significant at 0.05 level for the districts of Shahdol.

The coefficient of correlation between the achievement scores of reading comprehension and mathematics was between 0.23 in Rajnandgaon and 0.62 in Bilaspur. The value of 'r' is significant at 0.01 level for all the districts. Similarly, the value 'r' between RCF and mathematics is significant at 0.01 level for all the districts.

The coefficient of correlation between achievement in RCI and mathematics is significant at 0.01 level for all districts except Rajnandgaon. For Rajnandgaon the value of 'r' is significant at 0.05 level.

The coefficient of correlation between the achievement in RCC and mathematics is not significant for all the districts except Bilaspur. For Bilaspur, the value of 'r' is significant at 0.05 level. This indicated that there existed a positive relationship between achievement in RCC and mathematics. There existed a positive marginal correlation for the districts of Raigarh, Rajnandgaon, Sarguja and Shahdol.

The correlation results presented above could lead to the following conclusions:

1. The achievement in mathematics and word meaning is positively highly correlated for the districts of Bilaspur, Raigarh, Sarguja and Shahdol.
2. The achievement in mathematics and reading comprehension is positively highly correlated for all the districts.
3. The achievement in mathematics could help to predict the achievement in language.

AREAS OF DIFFICULTY IN LANGUAGE

The students of Class V found some of the items of Language Achievement Test (LAT) difficult. The analysis of difficult items was carried out. The ten most difficult items were identified for LAT.

Areas of Difficulty in Word Meaning

The data related to most difficult ten items is presented in Table 9.19. The students found item numbers 30 and 12 of word meaning synonyms as the most difficult. About 67 per cent students were not able to identify these items correctly. Similarly, item number 36 was found difficult by 64 per cent students from all the districts. Even teachers found some of the items of word meaning difficult (Gupta, 1994).

Table 9.19: Areas of Difficulty in Word Meaning

| S No | Item No. | Description | Percentage of Students who did not complete the item |
|------|----------|------------------------------|--|
| 1 | 30 | अवाक् - मौखिका (समान) | 67 |
| 2 | 12 | भार्या - पत्नी (समान) | 67 |
| 3 | 36 | आकर्षक - खिचाव (समान) | 64 |
| 4 | 16 | निर्दयी-अत्याचारी (समान) | 63 |
| 5 | 37 | सम्पन्न-गरीब (विपरीत) | 63 |
| 6 | 33 | शिला-पाषाण(समान) | 63 |
| 7 | 26 | निपुण-कुशल(समान) | 62 |
| 8 | 14 | सम्मान उपेक्षा (विपरीत) | 62 |
| 9 | 13 | बडबन्ध-कपटपूर्ण आयोजन (समान) | 62 |
| 10 | 31 | शीतल उष्ण (विपरीत) | 62 |

Areas of Difficulty in Reading Comprehension

The data related to the areas of difficulty in reading comprehension is given in Table 9.20

Table 9.20: Areas of Difficulty in Reading Comprehension

| S.No | Item No | Description | Percentage of Students who did not complete the item |
|------|---------|--------------------------------|--|
| 1 | 36 | गद्यांश का शीर्षक बताना | 88 |
| 2 | 21 | पानी के आकार से तात्पर्य | 80 |
| 3 | 33 | गोपाल कृष्ण के रोने का प्रभाव | 80 |
| 4 | 4 | प्रसंग बताने वाला | 77 |
| 5 | 44 | बापू का अर्थ | 74 |
| 6 | 28 | प्राचीन सभ्यताएँ नदी के किनारे | 74 |
| 7 | 35 | गोपाल कृष्ण के बारे में | 73 |
| 8 | 34 | वाक्य में खाली स्थान भरना | 72 |
| 9 | 24 | पहले मनुष्य ने खेती क्यों की | 71 |
| 10 | 37 | गद्यांश में शब्द का अर्थ | 70 |

The item number 36 was not correctly responded by 88 per cent students from all the districts.

Teachers who have taught Class V also found reading comprehension difficult. sixty four per cent teachers could not successfully provide title to a paragraph asked in LAT (Gupta, 1994).

AREAS OF DIFFICULTY IN MATHEMATICS

The areas of difficulty were identified for Mathematics Achievement Test (MAT). The data related to ten most difficult questions is reported in Table 9.21. Item number 23 related to multiplication by zero was not successfully answered by 91 per cent students of all the districts. Eighty per cent students were not able to solve successfully items related to odd number, capacity and place value

Table 9.21: Areas of Difficulty in Mathematics

| S.No | Item No. | Description | Percentage of Students who did not complete the item |
|------|----------|---|--|
| 1 | 23 | Multiplication of 7x0x9 | 91 |
| 2 | 18 | Conversion of units of weight | 87 |
| 3 | 27 | Addition | 85 |
| 4 | 9 | Representation of shaded portion into fraction | 85 |
| 5 | 36 | Representation of shaded portion into decimal | 82 |
| 6 | 35 | Division/Estimation | 81 |
| 7 | 29 | Odd numbers | 80 |
| 8 | 5 | Unit of capacity | 80 |
| 9 | 32 | Place Value comparison | 80 |
| 10 | 11 | L.C.M. of two numbers when one is factor of another | 79 |

Even teachers found some of the items of MAT difficult. An item of MAT related to the place value was not successfully completed by 62 per cent teachers (Gupta, 1994).

ACHIEVEMENT OF SCHOOLS

The achievement of schools was also analysed to find out the number of schools where average scores were below 40 per cent. The averages of maximum score and minimum scores were calculated to know the range of achievement in the districts.

Achievement of Schools in Language

The data related to achievement of schools in language is shown in Table 9.22.

It is evident from Table 9.22 that 25 schools out of 45 from Bilaspur scored below 40 per cent. This shows that achievement of 55.6 per cent schools of Bilaspur was not satisfactory. In these schools the teaching of language is not up to the mark. In order to understand the seriousness of the problem the average maximum and minimum scores of achievement of students may be taken into account in the district Bilaspur. The average maximum score was 53 in language which is about 63 per cent of the total score. If one is aspiring for the achievement of Minimum Levels of Learning by the students and finally by the school, the recommendation of the report of the National Committee on Minimum Levels of Learning

Table 9.22: Average Scores of Schools in Language

| Scores | BPR | RGH | RNG | SGJ | SDL |
|------------------|------------------|------------------|------------------|------------------|------------------|
| Below 40 percent | 25 (55.60) | 14 (37.80) | 26 (61.90) | 27 (60.00) | 33 (73.30) |
| Maximum | 53.10 (63.20) | 49.20 (58.50) | 46.20 (55.00) | 56.00 (66.70) | 42.20 (50.20) |
| Minimum | 04.00 (04.70) | 26.80 (31.90) | 20.30 (24.10) | 00.00 (00.00) | 09.20 (10.20) |

** Figures in parenthesis indicate percentage*

(1991) is to be taken as an ideal goal for the achievement. The report envisaged that about 80 per cent students achieving mastery over 80 per cent of competencies. If competencies are converted into scores then 80 per cent students need to score 80 per cent or more. A strong intervention strategy is required to move to the direction of the Minimum Levels of Learning. The average minimum score for the schools of Bilaspur is 4.0 in language. The target for the schools of Bilaspur should be to promote learning among the students to move in the direction of maximum score.

The number of schools in Raigarh district whose achievement is below 40 per cent is 14. The average maximum scores of schools was 49.2 and the average minimum score was 26. In terms of percentage, the achievement of scores lies between 32 and 59. In comparison to Bilaspur, schools in Raigarh are more homogeneous.

In Sarguja the average minimum score in language is zero. The average maximum score was 67 per cent. Sixty per cent schools scored below 40 per cent. Herculean efforts are required to raise the achievement levels of schools.

In Shahdol 73 per cent schools scored below 40 per cent. The average maximum and minimum scores were 42 and 9, respectively.

In Rajnandgaon 62 per cent schools scored below 40 per cent. The average maximum and minimum scores were 46 and 20, respectively.

From the above discussion, it may be concluded that:

1. Schools have heterogeneous grouping of students with a larger gap between maximum and minimum score.
2. The achievement of students in a large number of schools (38 - 73%) was below 40 per cent.
3. Due care should be taken to improve the achievement of students in language.

Achievement of Schools in Mathematics

The data of the average scores of schools in mathematics is given in Table 9.23.

Table 9.23: Average Scores of Schools in Mathematics

| Scores | BPR | RGH | RNG | SGJ | SDL |
|------------------|------------------|------------------|------------------|------------------|------------------|
| Below 40 percent | 37 (82.20) | 33 (89.10) | 41 (97.60) | 43 (95.50) | 42 (93.30) |
| Maximum | 21 (52.50) | 18.60 (46.50) | 16.80 (42.00) | 18.00 (45.00) | 18.50 (46.30) |
| Minimum | 00.00 (00.00) | 06.80 (17.00) | 00.00 (00.00) | 00.00 (00.00) | 00.00 (00.00) |

More than 80 per cent schools scored below 40 per cent in all the districts.

In Rajnandgaon 41 out of 42 schools included for the study showed achievement in mathematics below 40 per cent. The average minimum score was zero. The average maximum score is 17 which comes to 42 per cent. It is extremely difficult to raise the level of achievement of students up to 80 per cent as envisaged in the National Committee Report on Minimum Levels of Learning. The position of schools in all other districts is almost the same with minor deviations.

The average minimum score is zero in all the districts except Raigarh. In Raigarh the average minimum score is seventeen per cent. The average maximum score is below 50 per cent in all the districts except Bilaspur. In Bilaspur the average maximum score is 53 per cent.

From the above discussion, it may be concluded that:

1. The achievement of students in mathematics in more than 80 per cent schools was below 40 per cent.
2. The average minimum score is zero in all the districts except Raigarh.
3. The average maximum score is below 50 per cent in all the districts except Bilaspur. In Bilaspur, the average maximum score is 53 per cent.
4. Special efforts are required to improve the achievement of students in mathematics

ACHIEVEMENT AT A GLANCE

At this stage it is worthwhile to look at the achievement of students in language and mathematics of other districts of the country. The Baseline Assessment Study was conducted by The New Concept Consultancy Services in Uttar Pradesh and Tamil Nadu, the National Institute of Educational Planning and Administration (NIEPA) in Kerala and Karnataka and the National Council of Educational Research and Training (NCERT) in Assam, Haryana, Madhya Pradesh, Maharashtra and Orissa. The objectives of the study was to assess the achievement of students in Class IV or V in language and mathematics. The achievement of Class II students was also assessed to explain the achievement of sampled students. In all the studies multistage sampling procedure was used. Primary schools numbering 35 to 45 were randomly selected from each district.

Achievement in Assam

The BAS was conducted in four districts - Darrang, Dhubri, Karbi Anglong and Morigaon. The average achievement of Class IV students in mathematics varied from a low of 41 per cent in Karbi Anglong to a high of 56 per cent in Dhubri. The achievement of students in word meaning ranged from 50 per cent in Karbi Anglong to 63 per cent in Dhubri. In reading comprehension the mean achievement of students was the lowest 35 per cent in Karbi Anglong (Table 9.24). The average achievement of students in number recognition of Class II was between 70 to 79 per cent. In addition and subtraction the average achievement varied from a low of 56 per cent in Karbi Anglong to a high of 70 per cent in Dhubri. The mean achievement of Class II students in letter reading ranged from 51 to 72 per cent. In word reading the lowest percentage was 38 in Karbi Anglong.

Table 9.24: Mean Achievement of Students in Assam

| District | Class IV | | | Class II | | | |
|---------------|------------------------------------|-------------------------|-------------------------------|----------------------------|---------------------------------|-------------------------|----------------------|
| | Achievement in Mathematics MM40 | Achievement in Language | | Achievement in Mathematics | | Achievement in Language | |
| | | Word Meaning MM20 | Reading Comprehension MM24 | Number Recognition MM6 | Addition and Subtraction MM8 | Letter Reading MM10 | Word Reading MM10 |
| Darrang | 20.80 | 11.70 | 10.10 | 04.30 | 05.30 | 06.30 | 05.50 |
| Dhubri | 22.80 | 12.60 | 10.30 | 04.70 | 06.30 | 07.00 | 04.90 |
| Karbi Anglong | 16.50 | 09.90 | 08.30 | 04.20 | 04.50 | 05.10 | 03.80 |
| Morigaon | 17.80 | 10.70 | 10.00 | 04.20 | 04.80 | 07.20 | 06.20 |

M M Maximum Marks

Source: N. K. Jangra and D. D. Yadav, DIET P. Assam - A Summary, NCERT (Mimeo.), 1994

Achievement in Haryana

The BAS was conducted in four districts of Haryana, Hissar, Jind, Kaithal and Sirsa

The mean achievement of Class V students in mathematics varied from a low of 35 per cent in Sirsa to a high of 40 per cent in Jind district of Haryana. The mean achievement of Class V students in language (Hindi) ranged from 34.58 in Sirsa to 38.99 in Kaithal out of 84 marks. The mean achievement in word reading was higher than the mean achievement in reading comprehension. The students of Haryana achieved around 50 per cent marks in word reading. In reading comprehension the achievement declined up to 40 per cent (Table 9.25). Class II students scored lower in number recognition than in addition and subtraction in all the districts except Sirsa. In Sirsa, Class II students achieved higher in number recognition than in addition and subtraction. The average achievement in letter reading was higher than average achievement in word reading. The average achievement of Class II students in word reading varied from a low of 38 per cent in Sirsa to a high of 46 per cent in Jind.

Table 9.25: Mean Achievement of Students in Haryana

| District | Class V | | | Class II | | | |
|----------|------------------------------------|-------------------------|-------------------------------|----------------------------|---------------------------------|-------------------------|----------------------|
| | Achievement in Mathematics MM40 | Achievement in Language | | Achievement in Mathematics | | Achievement in Language | |
| | | Word Meaning MM40 | Reading Comprehension MM44 | Number Recognition MM6 | Addition and Subtraction MM8 | Letter Reading MM10 | Word Reading MM10 |
| Hissar | 15.26 | 19.64 | 15.63 | 03.81 | 04.10 | 06.23 | 04.39 |
| Jind | 15.82 | 20.92 | 18.00 | 01.91 | 03.59 | 06.43 | 04.63 |
| Kaithal | 15.65 | 21.61 | 17.38 | 03.94 | 04.27 | 06.14 | 04.52 |
| Sirsa | 13.86 | 19.81 | 14.76 | 03.53 | 01.70 | 06.35 | 03.84 |

Source. N K Jangra and Anupam Ahuja, DIPEP Haryana - A Summary, NCERT (Mimeo), 1994

The achievement in mathematics of students of Class V of four districts of Haryana was higher than the five districts of Chhatisgarh region.

Achievement in Kerala

The BAS was conducted in three districts - Malappuram, Kasaragode and Wayanad. The mean achievement of students of Class IV expressed in terms of percentage is given in Table 9.26. The average percentage achievement varied from a low of 34 in Malappuram to a high of 39.6 in Wayanad. The mean score of achievement in language (Malayalam) was higher than the mean score of achievement in mathematics. The percentage range was 45 to 51. The mean achievement scores in mathematics for Class II is 59 per cent. The average achievement in number recognition was higher than the achievement in addition and subtraction. The achievement scores in number recognition varied from a low of 70 per cent in Malappuram to 80 per cent in Kasaragode which is probably the highest in all the districts where BAS was conducted. The combined mean achievement score in language (Malayalam) of Class II students varied from a low of 66 per cent in Wayanad to a high of 69 per cent in Kasaragode.

Table 9.26: Mean Achievement of Students in Kerala

| District | Class V (in percent) | | Class II | | | |
|------------|-------------------------------|----------------------------|-----------------------------------|--|----------------------------|-------------------------|
| | Achievement in Mathematics | Achievement in Language | Achievement in Mathematics | | Achievement in Language | |
| | | | Number Recogni- tion MM6 | Addition and Subtrac- tion MM8 | Letter Reading MM10 | Word Reading MM10 |
| Malappuram | 34.10 | 44.80 | 04.20 | 03.40 | 13.20 | |
| Kasaragode | 38.40 | 45.30 | 04.80 | 04.50 | 13.80 | |
| Wayanad | 39.60 | 51.30 | 04.50 | 03.70 | 13.10 | |

Source: N V Verghese, DPEP(Baseline Assessment Study- Kerala) - A Summary, NIEPA (Mimeo), 1994

The achievement in language of students of Class V of Chhatisgarh region was higher than the achievement in three districts of Kerala. However, students of Kerala performed better in mathematics.

Achievement in Maharashtra

At the first stage the BAS was conducted in three districts - Aurangabad, Nanded and Parbhani. The average score of students of Class IV in mathematics was between 27 to 31 per cent. Students performed higher in word meaning than reading comprehension. In reading comprehension, the performance of students of Class IV varied from a low of 33 per cent in Nanded to a high of 34 per cent in Parbhani (Table 9.27). The achievement of Class II students in number recognition was higher than in addition and subtraction. In addition and subtraction mean achievement varied from 36 per cent in Nanded to 44 per cent in Parbhani. The average achievement of students of Nanded of Class II in letter reading and word reading was 48 per cent and 27 per cent respectively, which was exceptionally low. The achievement of Class II students in Letter Reading was 6.63 in Aurangabad and 6.79 in Parbhani. The achievement in Letter Reading was higher than Word Reading.

Table 9.27: Mean Achievement of Students in Maharashtra

| District | Class IV | | | Class II | | | |
|------------|---------------------------------|-------------------------|----------------------------|----------------------------|------------------------------|-------------------------|-------------------|
| | Achievement in Mathematics MM40 | Achievement in Language | | Achievement in Mathematics | | Achievement in Language | |
| | | Word Meaning MM20 | Reading Comprehension MM24 | Number Recognition MM6 | Addition and Subtraction MM8 | Letter Reading MM10 | Word Reading MM10 |
| Aurangabad | 10.88 | 08.09 | 08.06 | 03.57 | 03.11 | 06.63 | 04.09 |
| Nanded | 11.80 | 08.34 | 07.99 | 03.08 | 02.84 | 04.84 | 02.68 |
| Parbhani | 12.29 | 09.08 | 08.11 | 03.47 | 03.48 | 06.79 | 04.71 |

Source. N K Jangira and Sandhya Paranjape, DPEP Maharashtra - A Summary, NCERT (Mimeo), 1994

Achievement in Orissa

The BAS was conducted in four districts - Gajapati, Kalahandi, Rayagada and Phulbani. The mean achievement score in mathematics for Class V was 14.43 in Gajapati, 13.31 in Kalahandi, 15.02 in Rayagada and 16.61 in Phulbani. The achievement score varied from a low of 33 per cent in Kalahandi to a high of 42 per cent in Phulbani. The average achievement in word meaning was higher than the average achievement in reading comprehension in all the four districts. The average achievement in word meaning was around 50 per cent. The average achievement in reading comprehension ranged from 32 per cent in Kalahandi to 40 per cent in Phulbani (Table 9.28). The mean achievement of Class II students was higher in number recognition than addition and subtraction. The achievement scores of Class II in mathematics was about 56 per cent. The average achievement of Class II students in letter reading was higher than in word reading. The achievement scores ranged between 56 to 70 per cent.

Table 9.28: Mean Achievement of Students in Orissa

| District | Class V | | | Class II | | | |
|-----------|------------------------------------|-------------------------|-------------------------------|----------------------------|---------------------------------|-------------------------|----------------------|
| | Achievement in Mathematics MM40 | Achievement in Language | | Achievement in Mathematics | | Achievement in Language | |
| | | Word Meaning MM40 | Reading Comprehension MM44 | Number Recognition MM6 | Addition and Subtraction MM8 | Letter Reading MM10 | Word Reading MM10 |
| Gajapati | 14.43 | 19.17 | 14.30 | 03.96 | 04.24 | 06.83 | 06.28 |
| Kalahandi | 13.31 | 17.93 | 13.90 | 03.38 | 03.32 | 06.50 | 05.71 |
| Rayagada | 15.02 | 20.47 | 16.94 | 03.67 | 04.24 | 06.25 | 05.56 |
| Phulbani | 16.61 | 20.43 | 17.61 | 03.85 | 04.48 | 07.04 | 06.41 |

Source: S. Nagpal, DPEP Orissa - A Summary, NCERT (Mimeo), 1994

The students of Class V of four districts of Orissa performed better in mathematics in comparison to students of Chhatisgarh region.

Achievement in Tamil Nadu

The BAS was conducted in three districts of Tamil Nadu - South Arcot, Thiruvannamalai and Dharmapuri. The average achievement in mathematics of Class V students was around 28 per cent. The average achievement scores in word meaning was about 45 per cent. The mean achievement scores in reading comprehension varied from a low of 28 per cent in Thiruvannamalai to a high of 32 per cent in Dharmapuri (Table 9.29).

The mean achievement score in number recognition of Class II students was ranged from 47 per cent in Dharmapuri to 53 per cent in South Arcot. The average achievement of Class II students in addition and subtraction was exceptionally low (18 to 27 per cent) in all the districts. The mean achievement of Class II students in language (Tamil) was also low. The average range of achievement score in word reading of Class II students varied from a low of 18 per cent in Thiruvannamalai to 24 per cent in Dharmapuri.

Table 9.29: Mean Achievement of Students in Tamil Nadu

| Districts | Class V | | | Class II | | | |
|-----------------|---------------------------------|-------------------------|----------------------------|----------------------------|------------------------------|-------------------------|-------------------|
| | Achievement in Mathematics MM40 | Achievement in Language | | Achievement in Mathematics | | Achievement in Language | |
| | | Word Meaning MM40 | Reading Comprehension MM40 | Number Recognition MM6 | Addition and Subtraction MM8 | Letter Reading MM10 | Word Reading MM10 |
| South Arcot | 10.08 | 18.11 | 12.53 | 03.20 | 01.67 | 05.71 | 02.34 |
| Thiruvannamalai | 11.61 | 17.27 | 11.36 | 02.82 | 01.47 | 04.67 | 01.82 |
| Dharmapuri | 11.25 | 19.57 | 12.77 | 02.79 | 02.15 | 05.55 | 02.36 |

Source: The New Concept Consultancy Services, DPEP Tamil Nadu, Baseline Survey Report, New Delhi, 1994

The students of Class V of Chhatisgarh region achieved higher than the students of Tamil Nadu in mathematics. The achievement in language is almost at par.

Achievement in Uttar Pradesh

The BAS was conducted in three districts of Uttar Pradesh - Varanasi, Sitapur and Nainital. The mean achievement of students of Class V in mathematics varied from a low of 26 per cent in Sitapur to a high of 37 per cent in Varanasi. The mean achievement of students in word meaning was higher than the mean achievement in reading comprehension. The mean achievement of students in word meaning varied from 45 to 59 per cent. The mean achievement in reading comprehension varied from a low of 28 per cent in Sitapur to a high of 40 per cent in Nainital (Table 9.30). The average achievement of Class II students in number recognition is higher than the achievement of students in addition and subtraction. The mean achievement in number recognition ranged from 51 to 60 per cent. The mean achievement of students of Class II in language (Hindi) is slightly higher. The average performance of students in letter reading varied from 77 per cent to 84 per cent. The students scored on an average from a low of 41 per cent in Sitapur to a high of 58 per cent in Nainital.

Table 9.30: Mean Achievement of Students in Uttar Pradesh

| District | Class V | | | Class II | | | |
|----------|------------------------------------|-------------------------|-------------------------------|----------------------------|---------------------------------|-------------------------|----------------------|
| | Achievement in Mathematics MM40 | Achievement in Language | | Achievement in Mathematics | | Achievement in Language | |
| | | Word Meaning MM40 | Reading Comprehension MM44 | Number Recognition MM6 | Addition and Subtraction MM8 | Letter Reading MM10 | Word Reading MM10 |
| Varanasi | 14.94 | 21.02 | 15.20 | 03.60 | 04.58 | 08.36 | 05.33 |
| Sitapur | 10.28 | 18.10 | 12.50 | 03.10 | 03.77 | 07.67 | 04.07 |
| Nainital | 13.43 | 23.44 | 17.60 | 03.41 | 04.36 | 07.94 | 05.78 |

Source: The New Concept Consultancy Services, Baseline Survey of Three Districts of Uttar Pradesh, New Delhi, 1992-93.

The achievement in language of students of Class V of Uttar Pradesh is almost at par with the students of Chhatisgarh region.

Achievement in Madhya Pradesh

The mean achievement in mathematics of students of Class V varied from a low of 18 per cent in Satna to a high of 38 per cent in Guna

Table 9.31: Mean Achievement of Students in Bundelkhand and Malwa Region of Madhya Pradesh

| District | Class V | | | Class II | | | |
|-------------|---------------------------------|-------------------------|----------------------------|----------------------------|------------------------------|-------------------------|-------------------|
| | Achievement in Mathematics MM40 | Achievement in Language | | Achievement in Mathematics | | Achievement in Language | |
| | | Word Meaning MM40 | Reading Comprehension MM44 | Number Recognition MM6 | Addition and Subtraction MM8 | Letter Reading MM10 | Word Reading MM10 |
| Satna | 07.01 | 10.06 | 07.62 | 02.25 | 01.52 | 06.04 | 02.13 |
| Reewa | 10.84 | 15.52 | 12.65 | 03.56 | 02.57 | 06.33 | 06.33 |
| Sidhi | 11.63 | 12.25 | 14.81 | 02.98 | 01.68 | 06.21 | 02.73 |
| Tikamgarh | 10.97 | 11.78 | 11.64 | 02.67 | — | 05.50 | 01.92 |
| Chhatterpur | 10.42 | 12.60 | 12.30 | 01.27 | 02.34 | 05.93 | 02.02 |
| *Panna | 08.07 | 12.87 | 08.14 | 02.24 | 01.46 | 03.91 | 01.33 |
| Betul | 13.73 | 17.07 | 16.07 | 03.53 | 02.80 | 06.96 | 04.27 |
| Dhar | 11.69 | 13.23 | 13.99 | 03.09 | 03.01 | 06.25 | 03.57 |
| Mandsour | 10.42 | 11.91 | 11.20 | 03.31 | 02.61 | 06.64 | 03.83 |
| Guna | 15.00 | 15.00 | 12.27 | 02.76 | 03.43 | 04.94 | 02.52 |
| Rajgarh | 12.06 | 14.06 | 14.75 | 03.91 | 03.86 | 07.10 | 04.06 |
| Raisen | 12.11 | 15.71 | 14.81 | 03.24 | 03.02 | 06.56 | 02.55 |
| Ratlam | 11.36 | 14.75 | 15.23 | 03.66 | 03.83 | 07.08 | 05.24 |
| **Sehore | 11.48 | 13.40 | 13.26 | 03.37 | 02.93 | 04.50 | 02.53 |

Source : * D D Yadav, DPEP Madhya Pradesh (Bundelkhand Region) - A Summary, NCERT (Mimeo), 1994

**S K Yadav, DPEP Madhya Pradesh (Malwa Region) - A Summary, NCERT (Mimeo), 1994

The performance of students in word reading was higher than reading comprehension in almost all the districts. The mean achievement in reading comprehension of students varied from a low of 7.62 in Satna to a high of 16.07 in Betul. In Chhatisgarh region, the mean achievement of Class V students in reading comprehension varied from a low of 13.41 in Sarguja to a high of 16.01 in Raigarh (Table 9.2). This shows that the pattern of achievement is almost same in Bundelkhand, Malwa and Chhatisgarh region. The mean achievement in number recognition of Class II students varied from a low of 1.27 in Tikamgarh to a high of 3.91 in Raigarh. The mean achievement of students of Class II in addition and subtraction varied from a low of 1.46 in Panna to a high of 3.86 in Raigarh and Bilaspur.

The mean achievement of Class II students in letter reading was higher than word reading. In word reading the mean achievement of students varied from a low of 0.13 per cent in Panna to a high of 63 per cent in Rewa.

Achievement of Teachers

The performance of teachers was also assessed by the investigator on the same achievement test which was administered to the students. The mean achievement in mathematics of teachers was 76 per cent. The Report of the Committee on the Minimum Levels of Learning at the primary stage (1991) decried the inadequate and incomplete learning by the children. The Committee prescribed the performance target for teachers as 80 per cent or more of the students mastering 80 per cent of the prescribed learning level. The mean achievement score achieved by the teachers in the study conducted by Gupta (1994) is below 80 per cent. This indicates that the task is difficult to be achieved by the teacher in their own case.

Table 9.32: Mean Achievement of Teachers

| Teacher Group | Achievement in Mathematics MM40 | Achievement in Language MM84 |
|-----------------|------------------------------------|---------------------------------|
| All Teachers | 30.54 | 75.74 |
| Male Teachers | 30.53 | 76.03 |
| Female Teachers | 30.56 | 75.00 |

Source . K M Gupta, Teachers' Performance in Mathematics and Reading Test

The mean score of achievement of teachers in language is 75.74 per cent out of the maximum score of 84 per cent. In terms of percentage, the mean achievement score is 90 per cent.

The National Policy on Education (1986) reiterated that no people can rise above the level of its teachers. In a sense this indicates the achievement of students in the classroom also. The results of BAS conducted in different states and the achievement of teachers, if compared, reveal that students' achievement is almost 50 per cent or less in majority of the districts

While many reasons may be attributed to the low achievement of students of Class V, one very strong reason is that the achievement of students of Class II is also very low. Class II students will go to Class V with low achievement thereby not mastering the content of class which they have cleared. The poor mastery over the content in long range gets accumulated. This has resulted in low achievement in Class IV or V.

From the above discussion, it may be concluded that:

1. The achievement of students in mathematics is very low. The range of achievement is 18 to 56 per cent for Class IV or V.
2. The mean achievement of students in Word Meaning is higher than Reading Comprehension in Class IV or V.
3. The achievement of students in language is higher than achievement in mathematics
4. The achievement of students of Chattisgarh region is almost at par with the achievement of students in other districts of Maharashtra, Tamil Nadu and Uttar Pradesh Similarly, the achievement is at par with Bundelkhand and Malwa region of M.P.
5. In order to improve the achievement of students, special concerted efforts are required. The content knowledge of teachers should be updated

CHAPTER 10

IMPLICATIONS

The analysis and interpretation of the data of the Baseline Assessment Study have resulted into some significant findings and conclusions. Many prepositions may be drawn from the data-base. Implications for designing intervention strategies may be thought from several points of view. One design of implication may be for the control and manipulation of presage, process and product variables. Another line of action may be designed to strengthen the network of primary schools and improvement of quality of teaching learning. Ideally, the implementation of the strategies is most crucial for implications.

The generalisability of the findings for all the districts or the State may have some serious specific problems. The district-specific results and conclusions have emerged from the study which are applicable to the districts only. Hence, efforts have been made here to suggest implications for the districts of Bilaspur, Raigarh, Rajnandgaon, Sarguja and Shahdol where the BAS was conducted. The intervention strategies are presented under several groups like the classroom, teacher, head teacher, school, supervision, community, etc. Often more than one group involved in the implementation of a recommendation. Therefore, repetition of the recommendation is inevitable.

THE CLASSROOM

The classroom of all the schools ought to be modified to make it more attractive for all the students. the RGPSM should plan and work in this direction in order to achieve tangible results.

Achievement of Class II Students

The achievement of students in Class II is low. The students could read letters better than the word. The recognition of composite letter was a problem for the students. The students seem to mug up words without having sufficient mastery over the use of matras. They found it difficult to discriminate between letters and matras. The students require a lot of practice in word reading with the use of matras. Simultaneously, the textbook has also to be designed taking this finding into consideration. The walls of the schools should have lots of black space for practice in writing by the children. At this stage, efforts have to be made by the teachers to achieve the minimum levels of learning as envisaged in the national report. In the classroom, students should be provided opportunity for loud reading. Training of teachers has to be improved to involve students in teaching.

The teaching of mathematics also needs improvement. The study found that the students of Class II had not even mastered the basic concepts and a large number of students were not able to solve the problems of addition and subtraction involving zero in Class II. In Class V also students were not able to solve problems of multiplication by zero. This shows that the concept of mathematical operations involving zero is not mastered by students at the initial stage. About one-fourth of students of Class II from Sarguja and Shahdol achieved zero in mathematics. It is suggested that the textbook of mathematics should be designed to emphasise the basic concepts. The textbook should contain specific instructions for teachers and they should be provided training in the effective use of textbooks. The students should also be guided about the use of textbook in school and at home.

Achievement of Class V Students

The achievement of Class V students in language is very low (33 to 43%). Their achievement in word meaning is higher than reading comprehension. But the achievement in word meaning is also less than 50 per cent. Efforts are required to enrich the vocabulary of students. Children's magazines or books should be made available to the students. The books published by the Publication Division, National Book Trust and National Council of Educational Research and Training for primary school children should be made available to the school. It should be ensured that the students read these books. Boys achieved higher than girls in word reading and reading comprehension. Except Shahdol, in all other districts students from urban areas achieved higher than rural areas in word meaning and reading comprehension. This shows that the achievement in language is being influenced by exposure to outside environment other than home. The curricular activities like Bal Sabha, Debate, Antakshari, Competition in Literary activities should be made compulsory in all the schools. In Sarguja about four per cent students achieved zero in language. This requires special attention. More than 50 per cent students achieved less than 40 per cent marks in Rajnandgaon, Sarguja and Shahdol in language.

The achievement of Class V students in mathematics was also very low (25 to 32%). It was lower than the achievement in language. More than three-fourth students scored below 40 per cent. A large number of students were not having conceptual clarity about mathematical operations involving zero application.

Besides designing an intervention strategy to improve teaching and reading in the classroom, designing of textbooks should also be improved. Training provided to teachers in different methods and techniques in TTIs is rarely used in the classroom teaching. The active involvement of students in teaching may improve the learning. The activity method, learning by doing, child-centred approach, etc. have to be practised by the teachers. Teaching aids should be used by the teacher during the process of classroom interaction. The language teaching should be improved by the practice of loud reading, rapid reading, silent reading and dictation.

A lot of stress has been put on the continuous comprehensive evaluation during the last so many years. The evaluation of the students after unit or term supported by the feedback may help in the improvement of achievement. If possible, answer books of the test should be returned to the students after the correction and evaluation.

A provision should be made for diagnostic and remedial teaching. The remedial classes for slow learners have to be organised in the school. The working hours of the school need adjustment. Similarly, the number of working days in a year require our attention not in principle but in practice

Classrooms should be made attractive and display board should be fixed on the walls of the classroom to enable students to display their drawings, writings and other handworks.

Facilities of pre-school education should be strengthened in all the districts. The ECCE centres should be feeder institutions to primary schools.

THE TEACHER

The achievement of students is directly influenced by the performance of teachers in the classroom. The study has revealed that the teachers are not properly equipped to face the challenge posed before them for the universalisation of elementary education. Teacher training, competence, service conditions, availability of teaching aids and academic help have emerged as significant factors for the performance of teachers. More than one third teachers were untrained in Raigarh, Sarguja and Shahdol. Special efforts are required to get all the teachers trained.

In pursuance of the National Policy on Education (1986), District Institutes of Education and Training (DIET), Colleges of Teacher Education (CTE) and Institutes of Advance Study in Education (IASE) should be set up in the State of Madhya Pradesh to provide preservice and inservice teacher education under the centrally sponsored scheme of teacher education. It will be worthwhile to look into the study conducted by the Department of Teacher Education and Special Education of the National Council of Educational Research and Training for these institutions. The functioning of DIETs, CTEs and IASEs has not improved substantially for want of manpower and funds for the programmes.

DIETs of all the five districts covered under the study were not having adequate staff as per the guidelines circulated by the Department of Education, MHRD. The Institute of Advance Study in Education in the district of Bilaspur is almost non-functional. To improve the performance of teachers through training, the DIETs, CTEs and IASEs have to be equipped with the desired manpower and financial resources for the programme. The existing facilities of inservice education should be upgraded in these districts. The RGPSM should be empowered to look into the utilisation of resources provided by the MHRD for DIETs, CTEs, IASEs and SCERT of M.P

Preservice teacher training programme should be revitalised in the State to achieve the goal of universalisation of Elementary Education under Development of Local Specific Curriculum and Instructional Material.

Inservice training of teachers has to be made need-based and recurrent. The programme is to be geared for multigrade teaching, individualised instructions and remedial teaching. A perspective plan for preservice and inservice training of teachers should be designed for each district after taking into account the needs of teachers and the place. In comparison to male teachers female teachers have not undergone inservice education programmes. Therefore, inservice education programmes should be organised exclusively for women teachers where participation should be mandatory.

The teachers should be promoted to develop and use teaching aids in the classroom. The efforts of the Shikshak Samakhya Project need consolidation to make the classroom attractive. Effective and relevant teaching-learning material and aids should also be developed.

Teachers' level of knowledge in mathematics and language must be enriched. In order to integrate content and methodology, teacher's guides and textbooks should be made available in a single volume. Textbooks are to be designed in such a manner that points of stress are explained during the process of interaction with the students in the classroom.

Professional organisation of teachers are essential to make a cohesive group. This will also ensure and promote cooperation among them, help in community mobilisation and efforts for accountability.

The proportion of SC and ST teachers are not in proportion to the population in the districts. Efforts should be made to recruit more SC and ST teachers. As the female teachers are less in proportion to male teachers, more of them should be recruited. If need be, untrained but academically qualified teachers should be recruited first and then these female teachers should be provided training in the teacher training institutions. A special provision of housing should be made in the village of posting with the help of Housing Board.

Teachers with B.Ed. and M.Ed. qualifications are available in the schools but have to be given training in conducting action research so that they can design improvement for the system. Once these teachers are identified and are given the training and task of action research they need not be disturbed from the school of posting. This is bound to promote innovation and experimentation at school level.

The complete kit of training material for inservice education of teachers is to be developed in advance and the same may be supplied to the teachers before launching a programme. All the teachers of a school ought to be given training at a stroke. Calling one teacher from a school and providing training to him/her may serve administrative convenience but classroom practices are not improved substantially. The training of teachers may be organised in a phased manner. The training programme should be demonstrated in the classroom. Therefore, venue of training of teachers should always have a Class II or IV. The resource person/key person must demonstrate the practice first followed by theory in the classroom.

THE HEAD TEACHER

The head teacher is the key functionary for the improvement of quality of education at the primary level. The head teacher is expected to supervise the classroom teaching and provide on-the-spot guidance to the teacher. The study has revealed that homework is given to the students but correction of the homework is not carried out regularly. The head teacher can ensure the correction of the homework.

The duration of the school and number of working days are two factors related to the availability of time. Schools do not have watches to monitor timings. The head teacher is to be empowered to maintain regularity and punctuality in the school.

A rigorous training programme is essential before a person is promoted as head teacher. The induction level training will equip the incumbent to perform and identify with the new responsibility. The capability building inservice training programme may be organised for the existing head teachers. Keeping the multifaceted duties of the head teacher in centre, the training programme may include leadership behaviour, maintenance of the school records and supervision.

Staff meetings should be organised regularly in the school. The head teacher may act as a link between the community, administration and the school.

The head teachers are not aware of the level of school efficiency. Many of them cannot believe that all the students can achieve marks more than 80 per cent in a village school. The head teachers believed that teachers are competent. But what is the criterion of evaluating competence? They are to be provided training for improving school efficiency. The head teacher is the first person to know about deficiencies in the school. It will be better if he is provided training in the development of School Improvement Plan. Subsequently all teachers are to be involved in the development and implementation of the plan.

The RGPSM needs to maintain direct contact with the head teacher. A data-base is required for this. The head teacher should be given financial powers to make contact with RGPSM.

THE SCHOOL

The schoolwise analysis of the achievement has indicated that more than 80 per cent schools achieved below 40 per cent in language and mathematics. This requires drastic change in the school.

Many schools are single or double-room schools but rooms are in dilapidated conditions. The maintenance work has not been carried out since long. In fact these rooms are not fit to organise classes in all weathers. There is an urgent need to have sufficient classrooms in all the school to avoid learning interferences, The basic facilities of toilet and drinking water should be provided in all the schools.

The availability of material supplied under the Operation Blackboard scheme should be ensured. Teaching aids are to be made available in the school

In order to promote reading climate in the school, there is a need for a library where children's books are made available. Sufficient funds have to be allocated to schools to subscribe to children's magazines.

Each school should have a School Improvement Plan. The plan may contain minor details like seating plan of the students, position of the teacher, time table for teachers, etc.

THE SUPERVISION

Supervision is the weakest link in the primary schools. The responses of head teachers and teachers are contradictory. The teachers reported that academic help was not received from the head teacher or Block Education Officer (BEO). The schools were not regularly visited by the BEO. The Education Officers did not know the location of the primary schools. The ADIS and BEOs were not unanimous regarding the timings of the schools. On further investigation about the visits of the Education Officers it was revealed that the officers seldom got time to see the actual classroom teaching in schools. The BEO was not able to visit the schools because the number of primary schools in the block is very large. Heavy administrative work is another reason for not supervising the schools.

A programme of effective supervision should be designed. The supervisors of the primary schools should be provided training to master the techniques of helping the classroom teacher through supervision. The supervisor should be made accountable to the teachers to promote congenial environment in the school for learning.

The first and the second level of supervisors are to be given the training about the functioning of a teacher in the classroom. They should be in a position to demonstrate actual teaching. The informal discussion with the ADIs and BEOs revealed that they have no knowledge and experience about the functioning of primary schools. Therefore, an attachment programme for all the ADIS and BEOs need to be designed for providing first-hand experience.

THE POLICY

The study highlighted some of the points which require reconsideration of the policy:

- The implementation of the non-detention policy needs our attention. It is high time that policy ought to be implemented in toto.

- Sanctioning of teacher's post need not be based on the strength of the students only. Equal weightage may be given to number of classes in a school.

- The policy of recruitment has drawn our attention. It appears that recruitment of primary teachers is not carried out in these districts. The trained teachers are to be recruited by giving preference to female teachers. Even the BEOs and ADIS are to be appointed females.

- The policy relating to transfer and posting should be transparent. The transfer and posting is not an industry. The power to transfer and post is to be exercised judiciously because it can promote or mar the motivation of the teacher.

- The policy relating to Centrally Sponsored Schemes of Teacher Education - DIETs, CTEs and IASEs - may be looked into. Immediate steps are required to get these institutions established through the support of the Ministry of Human Resource Development and may be operationalised as per the guidelines for manpower and programmes.

THE MANAGEMENT

The State and the society has to design a dynamic system of management for primary education in the district. The amendments to the Indian Constitution for Panchayat Raj paved the way for the decentralisation of educational administration. The management system should be accountable to the teacher and the community.

The primary task of the management is to ensure the presence of the head teacher and teachers in the school. The right type of persons have to be recruited and posted in the school after providing induction training to them.

Because of pressing demands the community in general and many parents in particular do not understand the importance and value of education. The State machinery created for education is indifferent towards the basic problems of parents and community. The management system of education needs support from various schemes and department like Jawahar Rozgar Yojna, Health for All, Housing Board, Forest Department, etc. Better results in education may be achieved if a system is designed in such a way that all agencies support the management in its endeavour to achieve Education for All. The management system needs to identify persons, community leaders and agencies for social mobilisation.

The demand of the hour is to create additional support structure of management for the teachers in the classroom. The policing behaviour of the management may not help in achieving the goals but aggravate the situation. The teacher will submit out of fear but will not improve their classroom behaviour. The management has to look into these factors and build a climate of cooperation, support and trust for the cause of Education for All.

A mechanism is to be designed to develop a whole school training model. Training of one teacher or two teachers do not make drastic changes in the classroom interaction. The entire school staff - teachers and head teacher - needs training at one stroke and then the school is to be supervised by the training institution and supervisors to see the impact of the training in the classroom teaching. The management can only ensure this type of arrangement. The implementation of the School Improvement Plan is the major responsibility of the management. The management has to identify an agency for the district for designing a system of ongoing evaluation. The task may be entrusted to a College of Education, Department of Education of University, CTE, IASE, DIET or a non-governmental organisation.

The study has also highlighted that some of the requirements of the schools are not available at present. For example, textbooks to develop competencies among students are not available in the classrooms. The prototype of such equipment in many cases is to be designed and developed at the district level. The management need to design a mechanism of the development of prototype and its implementation or availability in the school.

A district has many institutions like CRC, BRC, Elementary Teacher Training Institution, DIET, CTE, IASE, University Department of Education, Colleges with Education as a subject, etc. Networking of these institutions is essential for qualitative improvement of school education. It will also provide an opportunity to pool the resources and expertise. The management can link these institutions for cooperation.

In order to meet the aspirations of dropouts, provision of Non-formal Education Centres have to be made. The management can take the help of non-governmental agencies in this venture.

Finally, the management should continuously monitor and evaluate the implementation of the programme in a district. Sustained and continuous efforts are required to improve and promote education in a village.

THE COMMUNITY

The community mobilisation is essential for achieving universal enrolment in a village and finally in a district. The low rate of literacy in all the districts, particularly among females is the biggest hurdle in achieving the target of enrolment and retention. The Community Awareness Programme should be designed in all the districts. This is particularly important for the enrolment of girls

Adult literacy should be promoted through Total Literacy Campaigns (TLCs) at the village level. The cooperation and assistance of non-governmental organisations, voluntary agencies, mahila mandals, etc. should be taken

Field Notes revealed many instances where community cooperation was necessary and essential for the school. For example, a security guard or watchman or chawkidar cannot be appointed for each school. The security of building and its material, tables, chairs, tatpattis, etc. should be the responsibility of the community. The community can keep the teacher free from many problems. The prevailing system of administration in many cases forces teachers to move around the offices at the block or district level. The teachers are paid from the school but attached to the office at block or district headquarters. The community can highlight these issues and thereby reduce the problem of teacher absenteeism for the school.

The headquarter of the posting should be decided by the Education Department. If a teacher is posted in a village school, the headquarter should be the village. Often teachers are forced to commute from a long distance. The community can extend its cooperation by providing a house in the village itself.

The community should participate in the functioning of the school activity through Parent Teacher Association and Village Education Committee. The two organisations may link themselves for universal enrolment, universal retention and qualitative improvement in achievement.

Women teachers need to interact with the community members. This will facilitate the enrolment and retention of girls. The posting of a woman teacher in the village has acquired a serious dimension for want of residential accommodation. The community can solve this problem easily

The rural women may take the responsibility of conducting survey in the village for promoting enrolment of all the children particularly girls with the active cooperation of the school

The universal access, enrolment and success may be achieved only through the cooperation and sustained efforts of all systems. The implementation of the National Policy on Education can lead us to Education for All

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